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IMPACT OF CHANGES IN THE TELECOMMUNICATIONS INDUSTRY ON SMALL BUSINESS

(Part 1)

HEARING

BEFORE THE

SPECIAL TASK FORCE ON THE IMPACT OF
TELEPHONE COSTS

OF THE

COMMITTEE ON SMALL BUSINESS
HOUSE OF REPRESENTATIVES

NINETY-EIGHTH CONGRESS

SECOND SESSION

WASHINGTON, DC, JUNE 26, 1984

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IMPACT OF CHANGES IN THE TELECOMMUNICATIONS INDUSTRY ON SMALL BUSINESS

(Part 1)

TUESDAY, JUNE 26, 1984

House of Representatives,
Special Task Force on the Impact of Telephone Costs,
Committee on Small Business,
Washington, DC.

The task force met, pursuant to notice, at 9:10 a.m., in room 2359-A, Rayburn House Office Building, Hon. Ron Wyden (chairman of the task force) presiding.

OPENING STATEMENT OF CHAIRMAN WYDEN

Mr. Wyden. Good morning. The task force will come to order.

We are very pleased today to have the first hearing of the House Small Business Committee's Special Task Force on the Impact of Telephone Rates on Small Business.

The purpose of this hearing is to assess the impact on small businesses of existing telephone rates and proposed changes in those rates. In the course of this year we expect to hold one or two more hearings in Washington, DC, and then several around the country. The data we gather will be for a report which will be issued at the end of this year.

But today's hearing will focus primarily on establishing what we know and don't know about the problem. The majority of witnesses are from the regulatory community and the industry. Four representatives of small businesses have offered to testify. Later hearings, both here and around the country, will devote a larger portion of time to specific case histories of small businesses and their representatives.

Before we get started I'd like to spend a couple of minutes discussing why the stakes for small businesses are so great that the Small Business Committee has set up a separate task force.

I'm sure some of the other members of the task force will also have some brief opening remarks.

Small businesses are the economic backbone of this country. They are the innovators. Over the past 50 years small businesses have been responsible for the creation of the majority of new products in this country. They are also the job creators. A majority of new jobs are created in the small business sector. They are the producers. During the 1970's small businesses accounted for 50 percent of the private sector's gross national product.

Small businesses are, however, one of the groups for which the economic barometers have not been very rosy between 1980 and the end of 1983, some 85,216 of this Nation's small businesses were forced to close their doors. At the current rate, another 28,000 small businesses will follow suit this year, and with interest rates now climbing to 13 percent for prime business customers, let alone for our small businesses, one wonders if there won't be even more failures than that.

Let me state right at the outset the obvious. Small business doesn't need any more Government-induced headaches, and yet that's exactly what small business seems to be getting from telephone regulators in this country.

In January of this year the Federal Communications Commission decided to defer until the middle of next year a plan to charge residential telephone customers a new flat fee of $2 per month for access to long-distance service.

At the same time, the FCC also deferred plans to charge businesses with only one phone line a similar fee of up to $6 a month. Despite pressure from the Congress and the small business community, the agency decided to go ahead with its up to $6 per line per month charge on all other business customers in the country effective this last month.

Thus, while access charges have been deferred for millions of American telephone customers, thousands of our small restaurants, our hardware stores, our gas stations, our travel agencies, the whole backbone of this country's small business sector is going to start paying. They began to pay extra last month just for the privilege of having the opportunity to make a long distance telephone call.

Now on the surface $6 per line per month doesn't sound like a whole lot of money to anybody. Remember that's $6 per line per month, but it's only the tip of the iceberg as far as increased phone charges go for our small businesses.

In addition to the interstate access charge, the FCC has mandated more rapid depreciation schedules and expensing of equipment than was formerly depreciated, both of which will add to basic local telephone charges in this country.

Some States are going to mirror the Federal interstate access charge with a similiar access charge for intrastate service.

On top of this, in some States, such as my home State of Oregon, structural changes in the way businesses pay for local service are being considered, approaches like mandatory measured service which would cause local phone bills to skyrocket for many of our businesses in this country.

When you add to that the billions of dollars of increases in basic local phone rates that have been approved in just the last year it's fairly obvious that we're not talking about small potatoes as far as telephone rate increases in this country.

I'm very pleased that Commissioner Fowler is here to kick off these hearings. Commissioner Fowler knows that he and I have disagreed from time to time on a number of telephone issues. I have felt for some time that the FCC's approach is essentially a mirror of trickle-down economics, that the approach is designed to give enormous rate breaks to those who are best off on the theory that

that's the only way you can create a rate base so as to ensure affordable telephone service to everyone else.

Mr. Fowler is a forceful advocate of his views. We are very happy to have him here.

Mr. Fowler, I think the majority of the subcommittee are always willing to be convinced by cogent arguments. We want to ensure on this task force that your plans and plans by other regulatory agencies will add up for this Nation's small businesses.

You have heard me state, and I state again, that I have great reservations about what has been put in place up to this point. I'm quite skeptical about what has been put in place. We are very anxious to hear your comments today.

Before we proceed to your testimony, I want to recognize my other colleagues. Let me turn now to my friend from Minnesota. The gentleman from Minnesota has been most interested in these issues and has worked with me on a number of small business concerns, like computer crime, and we're very happy to have him on the task force.

Mr. WEBER. Thank you, Mr. Chairman.

Mr. Chairman, I do have a brief written statement that I would like to ask unanimous consent to be included in the record.

Mr. WYDEN. Without objection, consent is granted.

Mr. WEBER. It won't take a long time but just let me add to your remarks my welcome to Chairman Fowler.

My concern, and I think it's the concern of a number of members of the committee, is somewhat parochial and that is because I represent a heavily rural district we feel that the potential impact of the changes that have been moving through the telecommunications industry are potentially very bad—not for sure but just potentially.

Small businesses in my district which are really not small businesses by the SBA's definition but small businesses in the sense that all of us think of mom and pop businesses as we were growing up are dependent on reasonable phone service rates to keep it a going business and they grew up in an environment in which they were guaranteed that by the regulatory framework and now it appears that they are no longer going to be guaranteed that.

Without prejudicing any decisions we might make on this committee, it is my belief very strongly that we have a responsibility as a committee to make recommendations that will help preserve the kind of environment in which those kinds of businesses can continue to prosper and thrive and not be adversely impacted by sweeping changes in the regulatory environment.

So I'm glad to work with you, Mr. Chairman, on this as I was on the computer crime bill, and I look forward to producing a product which can be utilized by the entire Congress.

[The opening statements of Congressmen Weber, Bedell and Bilirakis follow:]

OPENING STATEMENT OF HON. VIN WEBER, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MINNESOTA

Mr. Chairman, I appreciate the opportunity to be part of the Small Business Committee Telephone Task Force. I believe that this task force has an important role to play in shaping legislation which will affect how much small businesses will pay for telephone services.

I believe this issue is important to all of America, but that it holds particular importance for rural America—Main Street businesses and the "Mom and Pop" stores that dominate many towns in the Midwest. Rural small business needs the accessibility provided by telephones to compete with larger urban and suburban businesses. And as we enter the global economy—moving from a national economy to an interdependent international economy—these businesses will come to depend on telephone service to an even greater degree.

Many of the small businesses in my district, southwestern Minnesota, are not satisfied with the way in which the Federal Communications Commission and the Congress impacted their current phone rates and this task force might be able to address some of their concerns as we move through the hearing process.

Further, I would hope, and ask the chairman, to allow members of the task force to submit comments from their constituents and other interested parties in an effort to have available the whole range of small business opinion on the issue of telephones. Having worked with my friend, Rep. Ron Wyden, on the issue of computer crime and how it affects small businesses, I'm sure this request will be granted.

Let me end my remarks by asking that we all enter this, and subsequent hearings, with the determination to do what is best for small businesses all across this Nation. The members of this task force, as well as many of the people appearing before us, know only too well the importance small business has in creating economic growth, jobs, and increasing the standard of living for all of us.

OPENING STATEMENT OF HON. BERKLEY BEDELL, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF IOWA

I am very pleased to be here this morning as a member of the Task Force on the Impact of Telephone Rates on Small Business. I am eager to join my colleagues in an investigation of recent events that have taken place in the telephone industry and the effect they have had on small business and the general public.

I'm sure many of you are aware of two significant changes that have recently taken place. First we had the break-up of AT&T. This was followed by a decision by the FCC to impose a flat monthly fee or access charge on all telephone lines. The access charge on residential and single line businesses has been delayed until June 1985. Unfortunately, businesses with more than one line, and this includes most small businesses, began paying this access fee on May 25, 1984. In addition to the impact of this access charge, local rates have recently escalated. As of 1983, $2.5 billion in local rate increases were granted and another $5.6 billion are pending.

There is a great deal of apprehension surrounding these changes. In fact, the cumulative effect of these actions may cause local telephone rates to increase to a point where many citizens will be forced to give up their telephone service.

Small businesses, low-income individuals and rural communities are predicted to be especially hard hit by these changes. It has been estimated by the FCC that local rates will increase approximately 100% in the next three years. Rates for small companies may triple.

The access fee will ease off about $10 billion dollars from long distance rates and on to local rates. This may be the FCC's idea of economic efficiency, but I ask you, who will benefit, and who will suffer the most from these actions? If rates double, as the FCC has anticipated, about 4 million people, or 5% of the telephone users in this country may drop their telephone service—and this is a low estimate. And who will these people be? Rural Americans, blacks, the poor, the elderly, the handicapped. This is a far cry from a national goal set earlier this century to make the telecommunications system available to all people of the U.S.

Society benefits a great deal from our nearly universal telephone service. It would be a shame to jeopardize this situation because we did not take the time to anticipate potentially disasterous effects that certain changes in the telephone industry might have. It appears that the FCC's decision to implement the access charge was done without a comprehensive study of the potential impacts. The purpose of this hearing today is to get a better sense of these impacts and to examine ways to achieve equitable and affordable rates for telephone customers. Residential and small business subscribers should not be forced to take on the burden of a poorly thought out FCC access charge, nor should they be forced to bear unreasonable increases in their local telephone rates.

I am looking forward to hearing from today's witnesses and am pleased to be participating in this Task Force as we examine a serious problem that many people will be facing during this period of great change in the telephone industry.

OPENING STATEMENT OF HON. MICHAEL BILIRAKIS, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF FLORIDA

Mr. Chairman, I am pleased to be a member of this task force which I feel has an important part to play in assessing the impact of telephone rates on small businesses. As members of the House Small Business Committee we are constantly seeking ways in which to provide a climate which will permit businesses to thrive and which will encourage the creation of new business. Affordable telephone service is important to the viability of small business and I look forward to exploring this issue in depth over the next few months.

Needless to say, I have heard from many businesses in my district who have expressed sincere concern over the cost of telephone service and what effects substantial increases will have on them. I am anxious to hear the testimony which will be presented this morning, Mr. Chairman.

Mr. WYDEN. We appreciate the gentleman's participation and now let's turn to the gentleman from Missouri, Mr. Skelton.

Mr. SKELTON. Thank you, Mr. Chairman.

First I want to congratulate you for your efforts in putting this task force together and your leadership on this issue.

I'm concerned about the effect that the FCC's order will have on small businesses, but also in line with that, walk around any courthouse square in small town America and you'll see that most of the businesses around the courthouse square are small businesses and I'm fearful these are the ones that will be affected adversely.

This order that was handed down among other things did not really study the impact of these increases on small businesses and in the testimony this morning I certainly hope that the chairman will address himself and, of course, I will ask further questions regarding that.

When we say that this affects small businesses, Mr. Chairman, I think we should keep full well in mind that small town America at its very best is being affected very deeply by this.

Mr. WYDEN. The gentleman from Iowa, Mr. Bedell.

Mr. BEDELL. Thank you very much, Mr. Chairman. I also want to commend you for your leadership on this issue.

I am pleased to be a part of this panel and am eager to join my colleagues in investigation of these recent events that have taken place in the telephone industry and the effect they've had on small business, and indeed the general public.

Small businesses and low income individuals in rural communities are predicted to be especially hard-hit by these changes.

It has been estimated by the Federal Communications Commission that local rates will increase approximately 100 percent in the next 3 years.

If indeed this happens, I hate to tell you what the situation will be in rural America.

Mr. Fowler, I need to take you with me out to my district in Iowa. I need to have you walk up and down the small towns and walk into the little grocery stores and ask yourself how the devil those people actually exist with the meager business that they have. Walk by the vacant buildings that are so dominant in my small towns.

I think the trouble we have is we tend to think of things as we see them here in Washington, DC, or we tend to think about the K-Marts and the Sears stores. I'm telling you my people are having one devil of a time just existing out in small town rural America, and we may think that a few dollars extra for a telephone doesn't amount to very much, but I'm telling you that for those people it's a terrible, terrible, terrible problem, and the concern I have is that as we sit here in Washington we're not sufficiently aware of what the situation is for many of our people out in the hinterlands.

Mr. WYDEN. We thank the gentleman.

The gentleman from Tennessee, Mr. Cooper.

Mr. COOPER. Thank you, Mr. Chairman. I would like to add my congratulations on this fine effort that you've put together here.

I would like to echo the comments of, I think, all of my colleagues, especially those from rural America, that the formulas you all come up with, the plans you all have made, just don't seem to take into account the areas that we represent.

I have a tough time in my open meetings telling small businessmen, well, you'll benefit from the increased competition of long distance service because Sprint and MCI and others don't care to serve my area.

I have a tough time telling my small businessmen, well, sign up for measured service so you don't have to worry about an increased phone bill. We don't have measured service. We won't have measured service for a long time to come.

It's with great interest that I'm participating in these hearings, trying to get to the bottom of problems that affect all small businessmen in America, especially the rural small businessmen, and I look forward to your testimony.

Mr. WYDEN. The gentleman from Louisiana.

Mr. ROEMER. Thank you, Mr. Chairman and I apologize for being late. I, too, would like to thank you for having these hearings.

I will read the testimony of our witness. I have, because of my late arrival, not had a chance to hear the presentation, so I can do nothing more than echo what I've heard in the last few minutes and that is conflicting beliefs—one a strong belief in equal treatment under the law and a society that is deregulated to the optimum degree, and the other the need to realize that when separated by long distance from customers or from neighbors a telephone is not a convenience, it's an essential, and what might well be true in a high density populated area with well-traveled routes falls apart back home in my rural district.

If our witness, Mr. Chairman, can take that to heart and use it wisely and well, we will have done our job.

Mr. WYDEN. Thank you, gentlemen.

We are very anxious to hear your views, Mr. Fowler. We'll make your written statement a part of the record and if you would like to highlight some of the key views that you feel are central to the task force's examination, I think that would be particularly helpful.

TESTIMONY OF HON. MARK S. FOWLER, CHAIRMAN, FEDERAL COMMUNICATIONS COMMISSION

Mr. **Fowler**. Thank you very much, Mr. Chairman, and members of the Committee on Small Business' Telephone Task Force.

I would like to explain to you why the agency has made some of the decisions that we have. I will not, as you suggest, read my prepared statement. I will insert it into the record, but first of all what I would like to do is kind of sketch overall in very simple layman's terms what we are talking about here. I think that would be very helpful to this discussion.

First of all, envision a long-distance network of—if you will, circuits—that criss-cross the country. And envision that as being part of our great public telephone switched network which is used around the clock. It is used for many things. It is used for people to communicate one with the other, for a grandmother to get calls from her loved ones that she would like to get, and she makes calls. For computers to talk to other computers. It is very important that the system be used to the maximum. This has great productivity gains for America.

I am going to make three basic points here. No. 1, if we don't move in the way the Commission is moving, we are going to have higher, much higher local telephone rates, and the way we're embarking is the best way that we can see to move in order to preserve affordable telephone service.

There is no magic here, either. There are certain costs that have to be recovered and if they're not recovered in one place, they're recovered in another place.

No. 2, after the first point being that we've got to move in this way in order to preserve affordable service and if we don't local telephone rates will skyrocket—is that under our plan we believe we will be able to reduce long-distance rates 35 to 40 percent.

No. 3, there are some very great national benefits that America will realize as a result of our decision but which America will lose if we don't embark on the course that we're embarked on.

Let me go back to the first point, preserving affordable telephone service. Over the years, in order to keep local telephone rates down, State and Federal regulators engaged in a compact whereby more and more of the costs of local telephone service were placed in the long-distance rates.

Now this was able to work out quite nicely because, first of all, it kept down the real costs that were involved in providing local telephone service and since technologies—microwave and satellite technologies in particular—dramatically began to reduce the cost of providing long distance service, the shift in costs could be done without the average consumer noticing that long distance rates had in any way changed because indeed they had not changed. They would have been lower but shifting the costs of local into long distance kept them roughly where they were.

However, beginning in the 1960's and accelerating in the 1970's, the very largest users of our long-distance network—I'm talking about corporations that have several plants, for example, around the country and use long-distance to communicate not only in terms of voice but also of computer circuits using the long-distance network—began to realize that they were paying additional costs, roughly 15 cents a minute when you make an interstate long-distance call, to cover the cost of local service.

Not just large users were paying this. Everyone who uses long distance pays this additional approximately 15 cents a minute when you make long-distance calls to support local telephone service.

The problem here is this. These large users have both the incentive and the financial means to be able to abandon the use of the public telephone network and build their own private efficient systems.

They can lease satellite transponder space, for example. They can put dishes on the roofs of their various plants and thereby begin the process of abandoning the use of the public telephone network and going to their own private systems.

Now it's very important to note that a lot of this movement, and there is significant bypass occuring in America today, is caused by this loading on toll rates of the cost of local service.

One of the most impressive statistics that I ever saw was an 1980 statistic that was provided by the Bell System. As of 1980, and this figure is not significantly different today, 6 percent of the largest users generated 61 percent of the total toll or long-distance revenues. That's about $24 billion a year.

Now that 6 percent by definition has, A, the incentive and, B, the financial wherewithal to begin the process of leaving the public network and building their own private systems because it will save them money, big money.

Recognizing this danger of bypass, we felt we had to act. Let me give you an example.

In California, 1.3 percent of the largest users generate $700 million a year in toll revenues. If they were to leave the public network by bypassing the local exchange, that would result in approximately $8 more a month being put on the bills of the remaining subscribers, that is, residential and small business subscribers, ones who don't have the financial wherewithal to build their own private systems.

The State of California has commissioned a group to study the feasibility of constructing a private system for the State of California. It's a big State and they've used a lot of long distance over the years and they estimate that they could save about $1 billion a year if they built their own private system.

Now $700 million translates into about $8 a month, and I haven't done the arithmetic on what $1 billion is but it's considerately more than $8. Let's say it's $10.

Right there we're talking about $18 more a month. Now that wouldn't happen immediately. It would happen over the next several years. It is happening and we're doing a further study in 1984 to better quantify the dangers of bypass because these revenues, if they're lost as a result of large users leaving the system, have to still be paid by the captive subscribers who remain. Carriers are entitled to a rate of return on invested plants, on their base, and if they can't get it because those revenues are gone, they'll get it from the remaining captive subscribers and the captive subscribers are residential and small business subscribers, and the increases we're talking about, for example in this example I gave as to California, are significantly more than what the Commission's plan calls for.

I would also like to point out that if this wholesale bypass continues to accelerate and these very injurious effects and skyrocketing increases in local telephone rates occur, we will also lose the 35- to 40-percent reduction in long-distance rates as we shift the costs out of long distance and place them on the people who cause the costs.

Now I would like to make it readily understandable, because it is kind of a complex thing and it takes a period of time to set this up, if you'll bear with me.

The main cost I'm talking about here is what we call nontraffic sensitive plan. Putting it in simple terms, it's the wire, the copper wire that connects a home or business to the telephone office and the assorted costs that go with that, telephone poles and so forth.

Now that cost which has over the years been put into long distance increasingly, or part of those costs, is the same whether you use the telephone once a day, whether you use the phone to make 30 local calls only, or whether you use the telephone to make 30 local calls and 100 long-distance calls, it doesn't matter, or whether you don't use it at all, it's simply there, available. The cost of that wire is still there. It doesn't change. It is not dependent on whether you make local or long-distance calls.

So because of the threat of bypass we felt, and we still believe, that we must move to a more rational system of pricing in order, one, to preserve affordable local telephone service; and two, to reduce long-distance rates in order to encourage greater use of the network.

In other words, if you have a network, and envision tubes glowing in the dark late at night—we don't use tubes any more too much but I always liked this image. That network cost is the same at 10:30 at night whether it's being used fully or not, to keep the plant up available for use, but because we have over the years loaded all of these costs onto the long-distance network rates it means that the network as a whole is not being used as much as it would be if you took those costs out and that goes to the third point.

According to a study by Wharton Associates, which is a group of professors who do private consulting work--this was funded, I should say, by AT&T, but we believe that the thrust of the study is a valid study These professors also hold positions at Wharton Business School.

They found that the Commission's decision to encourage more efficient use of the long-distance network by taking those subsidies out of long-distance rates would result in several national benefits.

One benefit is over the next 4 to 5 years our route that we are following will create 400,000 new jobs in America, this FCC decision.

Two, it will create new wealth in society at all levels of about $46 billion.

Three, it will reduce the national debt about $21 billion because of increased economic activity in our economy which generates tax revenue.

Four, and I think probably one of the most interesting statistics of all, it will reduce the costs of goods and services overall in our society that the American people pay for by almost 1 percent, and that's because telecommunications costs are a component in virtually everything that is sold.

Now these are four great national benefits and these national benefits also will be lost if we don't do something to address the bypass problem.

Those are my three main points, Mr. Wyden and members here. No one likes to pay costs that they cause and here we're talking about the cost of that local loop that connects your home or business with the office.

A great majority of consumers will probably be better off—that is, those who use long distance. There will be some admittedly who will not be as well off as they were before because, although they were generating a certain cost by enjoying a loop connecting their home or business, they were not totally paying for that cost, and generally one of the things we say in society is that if a person causes a cost that person ought to pay for the cost.

The Commission didn't simply say cost based pricing and ignore some of the social policy equities that are also involved. We did two things that I think are very important. One, with regard to high cost telephone companies in rural areas, and all of you have in your districts such telephone companies, that because the average cost of those loops is generally higher than the average, we said we're not going to take the entire 15 cents per minute out of interstate toll rates, we're going to leave about 2 to 3 cents still imposed in long-distance rates and that will generate about $1 billion in 1984 in a fund which we will call the Universal Service Fund, and we will target that money to high cost telephone companies in order to keep down the costs in those areas of local telephone service, that is the cost of the local loop in those areas will continue to be subsidized.

No. 2, with regard to very poor people who might not be able to afford a $2 per month customer line charge, a $4 per month, whatever the transition plan might be that this Commission might devise. We said we will permit the States to file plans with us which permit the States to waive having these costs paid for by people who are needy, whatever test the State might come up with, for example a needs test.

So we've done two things. We've said for rural high cost areas we will cover that problem. For the truly needy that problem is solved, but for everyone else who can afford to pay for it, they ought to pay for it, and if we don't go this way local telephone rates will be higher, much higher, but if we do go this way we'll have significant reductions in long distance and we'll have the national benefits I spoke of earlier.

That in a nutshell is the overall problem being sketched. I hope it is somewhat comprehensible. It's a kind of a complicated subject.

That's what the debate is all about and I don't believe, members, that America can afford to lose this debate and lose this issue by going back to the old way where subsidies were shifted all over the place.

If you made long-distance calls and your neighbor down the street didn't make long-distance calls but he made three times as much as you did, you still subsidized the cost of his local loop. It was a very poorly targeted subsidy. What we've done, we've targeted the subsidy now, both to poor people and to rural high cost areas, and in this way overall we believe that the American people will be better off, much better off, than under the old system, and because the problem of bypass continues to accelerate, and every day of the week we learn of new systems being built, new whole teleports being built, designed to permit big business to escape paying the subsidy.

We've got to act and we've got to act soon. We cannot study this problem to death. That's basically in a nutshell the way we see it now.

Now there are lots of subpoints here which I would be most happy to discuss. I know you have some concerns here. You've expressed some of them this morning, and I would be delighted to answer your questions.

[Mr. Fowler's prepared statement follows:]

PREPARED STATEMENT OF HON. MARK S. FOWLER, CHAIRMAN, FEDERAL COMMUNICATIONS COMMISSION

CONGRESSMAN WYDEN AND MEMBERS OF THE COMMITTEE ON SMALL BUSINESS'S TELEPHONE TASK FORCE, GOOD MORNING. I AM PLEASED TODAY TO TESTIFY IN YOUR HEARINGS TO ASSESS THE IMPACT OF TELEPHONE CHARGES ON SMALL BUSINESSES.

WITH ME THIS MORNING ARE KEY STAFF MEMBERS WHO WILL HELP IN ANSWERING ANY QUESTIONS YOU MAY HAVE.

YOU HAVE REQUESTED THAT I ADDRESS THE FOLLOWING THREE ISSUES:

(1) THE COMMISSION'S JUSTIFICATION FOR IMPOSING CUSTOMER LINE CHARGES;

(2) THE IMPACT OF CUSTOMER LINE CHARGES ON CONSUMERS AND VARIOUS TYPES AND SIZES OF BUSINESSES BASED ON THE COMMISSION'S STUDIES OF USAGE PATTERNS; AND

(3) A BRIEF SUMMARY OF CURRENT CUSTOMER LINE CHARGE IMPACT STUDIES CURRENTLY UNDERWAY AT THE COMMISSION.

BEFORE I ADDRESS THESE PARTICULAR CONCERNS, I THOUGHT IT WOULD BE HELPFUL TO PROVIDE A LITTLE BACKGROUND ON THE COMMISSION'S ACCESS CHARGE DECISIONS.

The issues we address today arose in our MTS and WATS Market Structure Proceeding, instituted in 1978. The first issue addressed in the proceeding was whether or not the public would benefit from competition in the long distance market. The Commission concluded that such competition would in fact benefit the public. As a result of this Commission action, consumers and small businesses can choose from among AT&T, MCI, Sprint, Allnet, U.S. Tel, Western Union, Skyline, ITT and dozens of other companies to provide their long distance service. Competition has been good for the public.

This evolution in the structure of the phone business did, however, cause the Commission to carefully reexamine the manner in which the local telephone companies were compensated for the use of their facilities in providing long distance calls. One of the main purposes of the Commission's review was to make some sense out of the hodge-podge of settlements, divisions of revenue, ENFIA, business rates, open-end foreign exchange rates and the like, all of which constitute different charges, rates, and practices for local access. It is this subsequent scrutiny of the prior system which led to the Commission's access charge plan.

The Commission's goal in formulating an access charge plan was to achieve a proper balance among the four guiding principles:

(1) elimination of unreasonable discrimination and undue preferences among rates for interstate services;

(2) efficient use of the local network;

(3) prevention of uneconomic bypass; and

(4) PRESERVATION OF UNIVERSAL SERVICE

THE INVESTIGATION UNDERTAKEN BY THE COMMISSION WAS UNPRECEDENTED IN ITS THOROUGHNESS -- OVER FORTY VOLUMES OF COMMENTS WERE RECEIVED DURING THE NUMEROUS OPPORTUNITIES PRESENTED FOR THE PUBLIC TO SUBMIT THEIR WRITTEN SUGGESTIONS AND VIEWS ON COMMISSION PROPOSALS. THE COMMISSION CONDUCTED THE FIRST SERIES OF REGIONAL HEARINGS THROUGHOUT THE NATION IN COMMON CARRIER HISTORY. NUMEROUS STAFF INQUIRIES AND STUDIES WERE ALSO COMPLETED.

THE RESULT OF THIS TREMENDOUS EFFORT WAS THE COMMISSION'S ACCESS CHARGE DECISION OF DECEMBER 1982, SUBSEQUENTLY REFINED ON RECONSIDERATION. THE PLAN ADOPTED BY THE COMMISSION WAS DESIGNED TO MOVE TELECOMMUNICATIONS PRICING FROM A COMPLEX AND FUNDAMENTALLY UNFAIR SYSTEM OF CROSS SUBSIDIES AND INTERNAL SUBSIDIES TO COST-BASED PRICING. CHIEF ELEMENTS OF THE PLAN INCLUDE BOTH RESIDENTIAL AND BUSINESS CUSTOMER LINE CHARGES TO HELP RECOVER THE COST OF NON-TRAFFIC SENSITIVE PLANT, CONTRIBUTIONS TO OTHER LOCAL EXCHANGE COSTS BY INTEREXCHANGE CARRIERS, A "UNIVERSAL SERVICE FUND" TO HELP UNDERWRITE THE COST OF PROVIDING LOCAL TELEPHONE SERVICE IN HIGH COST AREAS, AND A METHOD OF PROVIDING SOME RELIEF FOR LOW INCOME CUSTOMERS, KNOWN AS A "LIFELINE SERVICE."

THE COMMISSION'S ACCESS CHARGE PLAN MAY NOT BE PERFECT; WE MUST OF NECESSITY MAKE SOME PREDICTIONS ABOUT AN INDUSTRY THAT IS UNDERGOING DRAMATIC AND CONSTANT CHANGE IN ITS STRUCTURE AND TECHNOLOGY. BUT I DO BELIEVE THAT WE HAVE ADOPTED THE MOST RATIONAL AND ECONOMICALLY SOUND PLAN POSSIBLE, WHICH WILL PROVIDE THE GREATEST LONG RUN BENEFITS TO BUSINESSES, CONSUMERS AND THE TELECOMMUNICATIONS INDUSTRY. AS THE COURT OF APPEALS NOTED IN PART IN ITS RECENT DECISION UPHOLDING OUR ACCESS CHARGE PLAN:

> "Over five years' study of complex and far-ranging issues set the foundation for the FCC's orders in this case. The Commission predicted industry trends and the impact of rate changes, reconciled widely diverse policy goals and numerous competing interests, and devised solutions to novel and difficult problems. Confronting rapid and fundamental changes in the telephone industry as a result of competition and fast-moving technology, the FCC acted for the most part with flexibility and care....
>
> We do not find unreasoned the Commission's determination that, to the extent practical, telephone prices should be "based upon the true cost characteristics of telephone company plant." Nor, with limited exceptions, can we quarrel with the FCC's exercise of judgment in deriving workable formulas, estimating numbers that cannot be mathematically proved, and making equitable assessments of the speed with which changes should be introduced."

With the brief background in mind, let me now turn to the specific issues you requested I address.

JUSTIFICATION FOR CUSTOMER LINE CHARGES

The rationale underlying the Commission decision to implement customer line charges is relatively simple and straightforward. A large portion of the costs of the local telephone network are represented by the line that runs between the customer's premises and the telephone company office. These "local loop" costs are non-traffic sensitive. That is, regardless of the number of calls made or the character of those calls, the

LOCAL LOOP IMPOSES THE SAME COSTS ON THE TELEPHONE COMPANY. IT IS ECONOMICALLY IRRATIONAL TO RECOVER THESE NON-TRAFFIC SENSITIVE COSTS ON A USAGE BASIS.

PRIOR TO THE ADVENT OF LONG-DISTANCE COMPETITION AND DIVESTITURE OF THE BELL SYSTEM, THE SYSTEM OF COMPENSATING LOCAL TELEPHONE COMPANIES NEED NOT HAVE BEEN ECONOMICALLY RATIONAL, BECAUSE ALL REVENUES ULTIMATELY WENT TO THE SAME POT. THUS, SUBSIDIES TO LOCAL TELEPHONE COMPANIES AND AMONG DIFFERENT CUSTOMERS, ALTHOUGH INEFFICIENT, COULD BE TOLERATED AND BECAME PART AND PARCEL OF THE COMPENSATION SYSTEM. IN LIGHT OF COMPETITION AND TECHNOLOGICAL CHANGE, HOWEVER, THE STRUCTURE OF MASSIVE SUBSIDIES, TARGETED NEITHER TO HIGH COST AREAS, NOR TO POOR SUBSCRIBERS WHO MIGHT OTHERWISE BE UNABLE TO AFFORD SERVICE, WOULD QUICKLY COLLAPSE OF ITS OWN WEIGHT. NEW TECHNOLOGY MADE IT EASY FOR A LARGE CUSTOMER TO BYPASS THE LOCAL TELEPHONE COMPANIES' FACILITIES AND AVOID PAYING THE SUBSIDIES INHERENT IN THE USAGE-BASED PRICING OF NON-TRAFFIC SENSITIVE COSTS, WHICH AMOUNTED TO SOME 15 CENTS PER MINUTE. MOREOVER, THE DIVESTITURE AND ENTRY OF COMPETITORS RESULTED IN THE PROLIFERATION OF LONG DISTANCE CARRIERS WHO HAD NO INCENTIVES TO MAKE USE OF THE LOCAL TELEPHONE COMPANIES' FACILITIES TO REACH THEIR LARGE CUSTOMERS. ALTHOUGH IT IS DIFFICULT TO QUANTIFY PRECISELY THE PRESENT BYPASS THREAT, THE RECORD ESTABLISHED THAT IT IS REAL AND IT IS SIGNIFICANT.

THE CONSEQUENCES OF BYPASS ARE STAGGERING; FOR EXAMPLE, IN THE STATE OF IOWA JUST 1% OF BUSINESS CUSTOMER LOCATIONS GENERATE 21% OF TOTAL TOLL REVENUES, BASED ON INFORMATION FROM BELL OPERATING COMPANIES. LOSS OF THESE CUSTOMERS FROM THE PUBLIC NETWORK AND LOSS OF THEIR TOLL CONTRIBUTION WOULD RESULT IN EACH REMAINING IOWA CUSTOMER HAVING TO PAY AN ADDITIONAL $2.62 PER MONTH IN TELEPHONE BILLS. IN TEXAS JUST 1% OF BUSINESS CUSTOMER LOCATIONS GENERATE 28% OF TOTAL TOLL REVENUES. THEIR LOSS WOULD COST EACH REMAINING

Texas customer an extra $3.69 per month. The same arithmetic works out to a loss of $2.82 per customer per month in Vermont. Since much of the costs are non-traffic sensitive, they would not decrease with the larger users abandoning the network. Consequently, the stranded investment and higher charges would create additional incentives for users still on the network to bypass, which in turn would leave even higher costs to be absorbed by an even smaller number of subscribers. Thus, failure of the Commission to act to overhaul the access compensation system would have led to the decline of universal service.

In constructing the access charge plan, the Commission has been ever mindful of its goal of preserving universal service. This concern was prevalent when the Commission deferred implementation of customer line charges until June 1985 for residential and single line business customers. Thousands of letters of concern from the public and from both federal and state officials responsible for formulation of telecommunications policy made it evident that there was a widespread feeling that additional examination and explanation was necessary because of perceived harms to universal service. By deferring customer line charges for residential and single line business subscribers, the Commission intended to assure that no one need drop off the network because of customer line charges while the Commission "fine tuned" the transition to an economically rational, cost based system of compensating local telephone companies for use of their facilities in providing access to the interstate network.

We found no basis to believe that customer line charges would harm single-line or multiline small businesses, particularly in light of the anticipated rate reduction in MTS service which, in many cases, would more than offset the flat charge. If it turns out that the modest monthly customer

LINE CHARGE, CAPPED AT $4 FOR SINGLE-LINE BUSINESSES THROUGH 1989 AND AT $6 FOR MULTILINE BUSINESSES, WOULD BE SO ONEROUS AS TO THREATEN ANY BUSINESS VIABILITY, THIS BUSINESS COULD INVESTIGATE WHETHER IT COULD LOWER ITS COSTS BY REDUCING THE NUMBER OF LINES USED OR CHOOSING ANOTHER OF THE MANY LOCAL SERVICE RATE ALTERNATIVES OFFERED IN MOST STATES.

WITH RESPECT TO CONSUMERS AND SMALL TELEPHONE COMPANIES, THE COMMISSION IS REFINING ITS ACCESS CHARGE PLAN TO PROVIDE TARGETED ASSISTANCE WHICH SHOULD PREVENT ANY EROSION OF UNIVERSAL SERVICE. THE UNIVERSAL SERVICE FUND, FUNDED BY INTEREXCHANGE COMPANIES, PROVIDES FINANCIAL ASSISTANCE TO LOCAL TELEPHONE COMPANIES WHOSE LOCAL LOOP COSTS EXCEED THE NATIONAL AVERAGE. THE COMMISSION, WORKING WITH THE FEDERAL-STATE JOINT BOARD, IS CURRENTLY EXAMINING WAYS TO PROVIDE EVEN MORE FINANCIAL ASSISTANCE TO SMALL TELEPHONE COMPANIES. THE COMMISSION, WITH THE ASSISTANCE OF THE FEDERAL-STATE JOINT BOARD, IS ALSO IN THE MIDST OF PROCEEDINGS TO DEVISE A "LIFELINE" PLAN WHICH WOULD ALLOW FOR WAIVER OR REDUCTION OF CUSTOMER LINE CHARGES FOR THOSE PEOPLE WHO MIGHT OTHERWISE FOREGO TELEPHONE SERVICE. ALTHOUGH INITIALLY IT WAS THE COMMISSION'S DESIRE TO ALLOW THE STATES TO DEVELOP SUCH ASSISTANCE PROGRAMS, THE LACK OF ACTION BY THE STATES CAUSED THE COMMISSION TO ASSUME RESPONSIBILITY FOR IMPLEMENTING "LIFELINES" OR OTHER SIMILAR ASSISTANCE. THE COMMISSION, IN IMPLEMENTING CUSTOMER LINE CHARGES, WILL BE VIGILANT IN MAINTAINING UNIVERSAL SERVICE.

IMPACT OF CUSTOMER LINE CHARGES

AS WE BEGIN TO IMPLEMENT OUR MTS/WATS INQUIRY DECISIONS, OUR NATION WILL BENEFIT FOR MANY YEARS TO COME. THE MOST OBVIOUS BENEFITS WILL BE LOWER LONG DISTANCE TELEPHONE BILLS. ON MAY 10, 1984, THE COMMISSION IN A LANDMARK DECISION ORDERED AT&T TO IMPLEMENT A 6.1 PERCENT ACROSS-THE-BOARD REDUCTION IN

ITS RATES FOR LONG DISTANCE TELEPHONE (MTS AND WATS) SERVICES, BOTH DOMESTIC AND INTERNATIONAL, EFFECTIVE MAY 25, 1984. FURTHER CHANGES IN THE RECOVERY OF LOCAL TELEPHONE FACILITIES' COSTS COULD YIELD REDUCTIONS IN INTERSTATE LONG DISTANCE RATES OF AS MUCH AS 35 TO 40 PERCENT. THESE LOWER LONG DISTANCE RATES WILL MAKE POSSIBLE NEW OPPORTUNITIES FOR SMALL BUSINESSES IN AMERICA. THEY WILL FACILITATE THE INCREASED USE OF TELECOMMUNICATIONS TO SUPPORT MARKETING AND SALES ACTIVITIES, AND TO IMPROVE PRODUCTIVITY. THEY WILL ENABLE A MERCHANT TO CONNECT HIS OR HER SMALL COMPUTER TO INFORMATION DATA BASES AND PROCESSING SYSTEMS IN OTHER AREAS, THEREBY PARTICIPATING MORE FULLY IN THE INFORMATION ECONOMY AND MAKING HIS OR HER BUSINESS MORE EFFICIENT. MOST BUSINESSES IN THE LONG RUN - INDEED, WITHIN THE NEXT YEAR OR TWO - WILL PROFIT SUBSTANTIALLY FROM THE COMMISSION'S DECISIONS IN THE MTS/WATS INQUIRY, BECAUSE THESE DECISIONS FOSTER REAL ECONOMIC GROWTH BY EFFICIENTLY PRICING COMMUNICATIONS SERVICES THAT ARE AN IMPORTANT FACTOR OF PRODUCTION THROUGHOUT OUR ECONOMY.

OTHER OVERALL BENEFITS TO THE NATION WILL BE EVEN GREATER. AMONG THE PRINCIPAL REASONS FOR CUSTOMER LINE CHARGES ARE THE RAPID DEVELOPMENTS IN TECHNOLOGY AND COMPETITION. THE MAGNIFICENT NEW TECHNOLOGIES FOR TRANSMITTING INFORMATION - MICROWAVE, FIBER OPTICS, SATELLITES - PROMISE TO REDUCE THE COST AND IMPROVE THE QUALITY OF ALL COMMUNICATIONS. COMPETITION WILL ALLOW BOTH NEW ENTREPRENEURS AND ESTABLISHED COMPANIES TO USE THESE TECHNOLOGIES TO PROVIDE INNOVATIVE NEW SERVICES. WE CAN NO MORE IMAGINE WHAT THESE SERVICES MIGHT BE THAN WE COULD HAVE IMAGINED HOME COMPUTERS, POCKET CALCULATORS, AND VIDEO GAMES BEFORE INTEGRATED CIRCUITS AND COMPETITIVE ENERGIES MADE THEM A REALITY.

IF COMPETITION AND INNOVATION IN COMMUNICATIONS ARE TO DEVELOP FREELY, REGULATIONS DESIGNED FOR NETWORKS OF COPPER WIRES AND A SINGLE, VERTICALLY INTEGRATED, MONOPOLY PROVIDER OF INTERSTATE SERVICES MUST CHANGE. WE MUST CHANGE RATES TO ENSURE THAT THEY REFLECT ACTUAL COSTS IN THE SEGMENTS OF THE MARKET THAT, AT LEAST IN THE SHORT-TERM, WILL PROBABLY CONTINUE TO RETAIN MONOPOLY CHARACTERISTICS - SUCH AS LOCAL EXCHANGE SERVICES - WHILE COMPETITION DRIVES PRICES TO COSTS IN THE AREAS THAT ARE COMPETITIVE. OUR DECISIONS IN THE MTS/WATS INQUIRY WILL ACCOMPLISH THIS. THEY WILL RESULT IN FAIRER RATES TO BUSINESS AND RESIDENTIAL CUSTOMERS AS WELL AS TO LONG DISTANCE TELEPHONE COMPANIES, BUT WITHOUT IMPAIRING THE UNIVERSALITY OF TELEPHONE SERVICE IN THIS NATION. BUSINESSES WILL INCREASINGLY BE ABLE TO BUY TELEPHONE SERVICES THE WAY THEY BUY OTHER SERVICES AND PRODUCTS - AT COMPETITIVE, COST-BASED PRICES THAT ARE NOT BURDENED BY ELABORATE, INEFFICIENT CROSS-SUBSIDIES.

AS THIS COMPETITION DEVELOPS, THE NATION AS A WHOLE WILL BENEFIT. ACCORDING TO ONE PUBLISHED STUDY, THE COMMISSION'S DECISIONS COULD, WITHIN THE NEXT FIVE YEARS, INCREASE REAL GROSS NATIONAL PRODUCT BY $46.2 BILLION, CREATE ALMOST 400,000 NEW JOBS, REDUCE THE OVERALL PRICE LEVEL ALMOST 1 PERCENT, AND SHRINK THE FEDERAL DEBT BY $21.5 BILLION. THESE ARE BENEFITS ANY BUSINESS PERSON AND ANY AMERICAN CAN UNDERSTAND AND APPRECIATE. IN THE LONGER TERM, FREEING OUR TELECOMMUNICATIONS INDUSTRY TO COMPETE VIGOROUSLY WILL PRODUCE STILL GREATER AND LONGER-LASTING BENEFITS. IN THE INTERNATIONAL ARENA, IT WILL HELP MAINTAIN AMERICA'S POSITION AT THE LEADING EDGE OF TELECOMMUNICATIONS, AN IMPORTANT AND FAST-GROWING SEGMENT OF THE INTERNATIONAL ECONOMY.

THE COMMISSION RECOGNIZES THAT NOT ALL CUSTOMERS WILL PROFIT IMMEDIATELY FROM OUR DECISIONS. THE 6.1 PERCENT REDUCTIONS IN LONG DISTANCE RATES ASSOCIATED WITH INTRODUCTION OF CUSTOMER LINE CHARGES ARE NECESSARILY

SMALLER THAN THEY WOULD HAVE BEEN UNDER THE COMMISSION'S ORIGINAL PLAN DUE TO THE DEFERRAL OF RESIDENTIAL AND SINGLE-LINE BUSINESS LINE CHARGES. AS FURTHER COMMISSION DECISIONS CONCERNING CUSTOMER LINE CHARGES ARE IMPLEMENTED, HOWEVER, THE RATE REDUCTIONS, RESULTING SAVINGS TO BUSINESSES, AND PRODUCTIVITY IMPROVEMENTS SHOULD GROW SUBSTANTIALLY.

CURRENT COMMISSION STUDIES

THE COMMISSION HAS A NUMBER OF STUDIES AND PROCEEDINGS UNDERWAY WHICH ARE EXAMINING THE IMPACT OF, AND WAYS TO REFINE, THE COMMISSION'S ACCESS CHARGE PLAN. I WILL BRIEFLY DESCRIBE THE MAJOR EFFORTS:

- THE COMMON CARRIER BUREAU IS CONTINUING AND EXPANDING THE INVESTIGATION INITIATED IN RESPONSE TO A PETITION FROM THE STATE OF MICHIGAN REGARDING THE EFFECTS OF FEDERAL DECISIONS ON LOCAL RATES AND THE AVAILABILITY OF LOCAL SERVICE. THE STAFF IS SEEKING ADDITIONAL AND UPDATED INFORMATION WHICH IN CONJUNCTION WITH REFINEMENTS TO OUR ECONOMETRIC MODEL SHOULD PROVIDE AN EVEN CLEARER PICTURE ON UNIVERSAL SERVICE ASPECTS OF FEDERAL ACTIONS.

- IN CONJUNCTION WITH THE FEDERAL-STATE JOINT BOARD, THE COMMISSION IS DEVISING A PROGRAM TO PROVIDE ADDITIONAL FINANCIAL ASSISTANCE TO SMALL TELEPHONE COMPANIES;

- In conjunction with the Federal-State Joint Board, the Commission is conducting a further rulemaking to devise exemptions or target assistance for subscribers who may not be able to afford customer line charges; and,

- In conjunction with the Federal-State Joint Board, the Commission has undertaken a rulemaking to examine how best to implement customer line charges for residential and single line business customers. The Commission is also revising its transition to full implementation of its access charge plan, including the treatment of Centrex and WATS lines.

CONCLUSION

In conclusion, thank you for the opportunity to appear before you to address the Commission's access charge plan.

My fellow Commissioners and I, as well as our staff, are very sensitive to the concerns that the access charge plan may have an adverse impact on consumers or small businesses. I hope you will agree that we have taken, and will continue to take, sufficient steps to minimize any harmful effects while maximizing the benefits which will flow from a more rational and economically sound method of access compensation. We will remain vigilant and we look forward to any input or information you have to contribute to our efforts.

This concludes my prepared testimony. We would now be glad to respond to any questions you may have.

Mr. Wyden. Thank you very much, Mr. Chairman. We all do have some questions.

We are missing our timer in this task force, but we will try to adhere to the 5-minute rule.

Mr. Fowler, let me begin. First, I participated in the joint Senate-House hearings held by the Commerce Committee last July 28, and at those hearings you stated that local service rates were going to double in the next 3 years.

Have your views changed on that point?

Mr. Fowler. Not significantly, Mr. Wyden. However, I want to point out to you that that is made up of a number of things. It is made up of inflation. It is made up of increased depreciation policies, both at the State and Federal level, and that estimate does not take into account strictly Federal decisions. It takes into account a projection of both Federal and State decisions in this area.

Mr. Wyden. What effect would this 100-percent increase in local rates have on the percentage of households with telephones in this country, Mr. Chairman?

Mr. Fowler. Well, we have several studies and we are even looking at this further in 1984.

According to the most reliable study we have, which is the Perl study which was submitted by the Bell Co.'s and was based upon a very large data base and 1980 census figures, showed practically no effect in terms of price increases on telephone service demand.

To answer your question, that would be, according to the Perl study that kind of a rate increase would result in about a 1-percent decrease in telephone demand.

Now decrease means not necessarily that they lose telephone service. They may opt, for example, Mr. Wyden, to go to lesser priced or more inexpensive optional telephone plans for basic service.

Mr. Wyden. We seem to read the Perl study differently. It seems clear to me that a 100-percent increase in local phone rates in this country, according to the Perl study, would result in 5 percent of the approximately 80 million households with telephones dropping telephone service. That means we lose 4 million households if that were the case.

The reason I asked this question is if we lose 4 million households, if 4 million households in this country can't have telephone service, what effect would this tremendous loss have on the business community and their rates.

Mr. Fowler. We don't think that that's the case. I don't know what study. You said the Perl study, sir. The latest study we have would indicate that if you had a 100-percent increase, about a 1-percent decrease in demand.

I think the other point is that with lifeline waivers, which I mentioned earlier, they need not drop off the system. They can go to other plans.

Mr. Wyden. So you think there aren't going to be a huge number of subscribers leaving the system as a result of a 100-percent increase in local phone rates, Mr. Chairman?

I just have to disagree with that most strongly because what we found and what we're going to hear later today is that most small businesses make mostly local calls with a few long distance thrown in.

We found, and NFIB is going to testify later today, that what many small businesses in this country pay just for the privilege of making a long-distance call, actually exceeds the total service charges of the long-distance calls they make.

I would like to hear further elaboration of how a 100-percent increase in local phone rates isn't going to cause a huge number of people to leave the system.

Mr. FOWLER. Well, the Perl study is probably the most exhaustive study we have so far, sir, and it was a nationwide data base that was used, using 1980 Census figures.

He found a 1-percent decrease in demand if you had a 100-percent increase. That is the price elasticity that he concluded would occur.

Again I want to stress that he did not take into account the fact that we have lifeline service that says if a State wishes to waive that charge for people who can't afford it, they may, and the States I believe will be coming in with plans to do that. That was not taken into account in his elasticity study.

I would also like to make the point that one of the reasons you have very low dropoffs, quite frankly, is that for years and years the price of local telephone service has been very underpriced so that people will tolerate these kinds of increases over a period of time, and we're not talking immediately, we're talking about over several years, because it is underpriced and because they value local telephone service so that those increases would not cause them to either halt either using the service or going to another form of the service.

The other thing it doesn't take into account is that incomes over the period of time that the Perl study looks at, which is over several years longer than 3 years, it's looking long-term I think is the way the study is phrased, does not take into account rises over the long term in personal income.

There are lots of factors that actually I think will make the elasticity even better than what the study shows because it doesn't take into account certain other externalities.

Mr. WYDEN. One last question for this round and then I want to let the other members——

Mr. FOWLER. Oh, the other point—I'm sorry, sir. I wanted to mention that in Washington State they put in a $2 charge last year and they did a very careful followup study and the dropoff rate attributed to that charge was four-tenths of 1-percent, virtually zero.

Mr. WYDEN. I have different information on that point, as well. In the State of Washington they have postponed things like mandatory measured service for business, which we face in my State and other States, so again we may have a difference of opinion in terms of studies.

Let me ask one last question. I think you heard from some of the members on the task force already about their concern that thousands of small businesses in this country are just walking an economic tightrope. Thousands of them have failed in the last year and those that are in business balance their interest charges against their fuel bills and fuel bills against their insurance costs and they're just walking an economic tightrope.

Before you imposed the access charges on all those two, three and four line small businesses, did you all make any effort at the FCC to analyze the effect that new access charges would have on these small businesses?

Mr. FOWLER. Yes, indeed. We had the Perl study, a 1970 study. We had an updated Perl study which I've alluded to here. We looked very carefully as a result of a petition filed by the State of Michigan at the impact of Federal decisions, including our tentative access charge decision on universal service and dropoff rates.

For example, our conclusion in the Michigan study was that over the next several years, through 1990, local telephone rates as a result of Federal decisions would rise about 6 percent per year.

That is a modest increase, well in line with other commodities in our society.

Indeed, I think one of the most interesting statistics I have concerning the underpricing of local telephone service is this one. In 1935 the cost of basic service in a suburb of Denver was $3.50 a month. In 1983 dollars that would be $24.60 if you adjusted that for inflation, but they're paying in that suburb about $7.50 a month. It costs roughly a third of what people were willing to pay for that in 1935.

That's why the Perl study, I think it seems to be not only an exhaustive study but it makes sense for all kinds of reasons when it predicts a very low dropoff because telephone service has been so underpriced over the years.

My main point is this, sir. If we don't do something here to solve this bypass threat, we're going to see much higher local telephone rates and there's no magic here. Either we take it out of toll in order to try to stem the flow of large users from the system because we need their dollars to keep telephone rates low, or we don't.

Mr. WYDEN. We're going to explore bypass with you on the next round. I have felt for a long time that the reason businesses bypass has as much to do with service as it does with prices but we will talk about that in a moment.

I would just like to ask, Mr. Chairman, if you could furnish this task force the various materials that you used to prepare your access charge decision because I just must say that I have seen no evidence of any analysis that justifies these access charges on small business.

You have, as you have so often and very forcefully, predicated these access charges on long distance rate reductions.

I have listened to Chairman Fowler closely on a number of occasions and the whole premise behind this are these massive long distance rate reductions, but for small businesses and their usage patterns the evidence is very, very clear that they make mostly local calls. They make mostly local calls with a handful of long distance thrown in and the fact is that the people who are going to benefit from access charges and any long distance rate reductions are those 6 percent of the people that you talked about, those 6 percent of the businesses at the upper end of the economic ladder, and for the people in Berkley Bedell's district and Ike Skelton's courthouse district, there is bloody little relief. I hope to see these written analyses because if one did an analysis of the usage patterns, just the usage patterns of business telephone service in this country alone, I think it would be impossible to justify these recent FCC actions.

Mr. **Fowler**. Mr. Wyden, first of all, I'm not sure that anyone really knows that it's true that small business doesn't make long distance calls or a good number of long distance calls.

There are lots of small businesses in this country that use long distance, for example, to make sales from a small firm in California to somebody in New York.

The second point, this really has nothing to do with whether long distance calls are made or not. It has to do with the cost of that local loop and how we recover that cost and it doesn't matter whether you make long distance or local calls or not, you are generating a cost, and what we're saying is except for very poor people and people in rural high cost areas, you ought to pay for it.

The other point I want to make is, if I just may digress here for a moment, I just have a couple of States we pulled to show you the magnitude of the threat of bypass; 6.4 percent of the businesses in Minnesota generate 28 percent of the business long-distance revenues.

Mr. Roemer, in Louisiana, 10 percent of the businesses generate 73 percent of the business toll revenues.

Mr. Skelton, in Missouri, 1 percent of the businesses generate 33 percent of the business toll revenues, and, Mr. Bedell, in Iowa, 1 percent of the business locations generate 21 percent of the total toll revenues.

What I'm saying here is that if these people leave in all of these States and these statistics are similar for all States, you've got a problem with local telephone rates. If we see over the next several years a mass abandonment of our national phone system by large users and skyrocketing local rates hitting small business people and residential subscribers alike, we're going to wind up with a crumbling, rapidly deteriorating national telephone system, and we're going to have a series of very efficient, privately owned, privately operated communication systems of large users.

Mr. **Roemer**. Would you yield on that point?

Mr. **Wyden**. I've exceeded my 5 minutes.

Mr. **Roemer**. Would you yield on that one small point?

Mr. **Wyden**. I would be happy to yield to the gentleman.

Mr. **Roemer**. If your statistics are correct, and I'm sure that they are, does your access charge policy equate in statistical numbers—the numbers you just gave us?

For example, take Iowa. If 1 percent of the users generate 20 percent of the total toll fees, do the access charges just increase by 20 percent across-the-board to make up for that expected difference, or do you go further than that?

Mr. **Fowler**. No, sir. They don't correlate directly, our actions here and those actions.

Mr. **Roemer**. We're hearing about 100 percent increases and you're talking about over the next 3 years 100-percent increase in the charge for use of the telephone, and yet the numbers you throw out are one over 20, 10 over 60.

Do you keep the same kind of proportionality in your rate increases? I don't think you do.

Mr. **Wyden**. I'm going to recognize my colleagues now on their own time.

The gentleman from Minnesota.

Mr. **Fowler**. I just wanted, if I could, sir, to just reply to his question.

Mr. **Weber**. I do have a time bind and I wonder—I'm not trying to prevent the chairman from responding, but I want to get in a couple of questions and then I'm afraid I'm going to have to run. I hope I am able to come back at least for some of the later panels.

First of all, and I'm not going to ask you to respond to this now, but the figures that you've thrown at us—6.4 percent of the users generate 28 percent of the revenues—do not seem from my perspective to be particularly helpful in and of themselves.

All you are telling us is that people that use the telephones a lot pay more telephone bills. I think I understand that but you have to give me a little bit more of an analysis before you can convince me that that 6.4 percent of the users are going to go off the system.

I'm not saying you don't have that analysis. All I'm saying is that the way in which you presented those statistics to this committee, one, don't convince me or don't show me that there's anything there and, two, they don't necessarily speak to our charge here.

Second, Mr. Chairman, I would ask unanimous consent that members be permitted to submit questions in writing to this panel and to future panels as well.

Mr. **Wyden**. Objections from colleagues?

I think it's a very sensible suggestion.

Mr. **Fowler**. Mr. Weber, I'd like to make available to you the materials we have on bypass so far and when we conclude our bypass study we will make this available to the committee.

Mr. **Weber**. We would appreciate that.

The point I want to make, though, because I have to confine myself because of my own schedule to only one question, you said that studies have given you some indication of what small business users would feel from your actions.

You talk about companies that use long distance service for sales. I think my point that I would make, and I think my colleague from Iowa and probably my other colleagues on the panel as well would make, and I tried to allude to it in my opening statement, is that that ain't what we're talking about when we talk about small business.

I'm talking about the Slayton Ben Franklin Store in Slayton, MN. I'm talking about little grocery stores and little hardware stores and little appliance shops and small, tiny, family-owned businesses that don't have a sales force at all. The owner is the bookkeeper, is the salesman, three to five to seven employees.

Have you done anything, any kind of a study that would give you any kind of an indication of what your actions are doing to that level of business?

Mr. **Fowler**. Yes. I think the Perl study which deals with elasticities—that is, what happens when prices are raised in terms of decreasing demand—would be applicable and that shows, as I indicated to Mr. Wyden, if you had a 100-percent increase it would result in about a 1-percent decrease in demand and I think that is probably the best answer.

Mr. **Weber**. And you're concluding from that that the price increase would not be an argument?

Mr. **Fowler**. Well, I'm saying that the cost of all goods and services, Mr. Weber, as you know go up. They go up because of lots of things, including inflation, and telephone service is no different than anything else and I know that it's a very difficult issue for all of us.

As to the very small businesses, the point I want to make is that they do generate a cost and either they should pay for it or someone else has to pay for it and right now if I make a long-distance call and they don't, I'm paying part of their local loop costs. I don't think that's fair.

Also, it is not fair to conclude that all small businesses aren't profitable and that all small businesses are not able to afford that.

As for those businesses that perhaps have 10 lines, maybe they need to have eight lines. Maybe because it's so cheap, because it's been so subsidized, this might cause them to think again about how many lines they need.

There are no easy answers in this area, sir, and some people will be not as well off as they were and others will be much better off.

Mr. **Weber**. One last question. Is the elasticity curve that you mentioned identical for businesses of all sizes?

Mr. **Fowler**. It applies. It is a general elasticity principle. It applies to all telephone users.

Mr. **Weber**. You cited specifically a 100-percent increase would result in a 1-percent decrease. Are you contending or do you believe that that basic ratio applies for all sizes of business?

Mr. **Fowler**. That is my understanding, yes, sir.

Mr. **Weber**. It seems to me to be fairly unlikely. Just intuitively that doesn't make sense to me.

Mr. **Fowler**. Well, if you consider that local telephone service—the average telephone bill now in the country is about $13.50 a month. That's the average for local service and it varies from State to State.

If you assume by 1987 or 1988 it was $26 a month and that may or may not be correct, it may be too high, it may be a little too low. In any case, I would and most people would be willing to pay that for local telephone service because it's worth it to them.

The other point I want to make is at the same time the other component of most people's bills will be coming down, the long distance portion, and right now the majority of people make long-distance calls and the average bill is about $37 a month, roughly $13.50 for local service and the remaining part for long distance service, so we think most people will be as well off or better off as a result of this, most Americans including small businesses.

Now the other point I want——

Mr. **Wyden**. I understand the gentleman from Tennessee has to leave momentarily so let us recognize him.

Mr. **Cooper**. Thank you, Mr. Chairman. I have one quick question.

Could you review for me, Mr. Chairman, the reason why this great bogeyman known as bypass; why we can't tax, or in some other way deal legislatively with bypass as a problem?

Why are these 1 percent or 6 percent of the big companies so elusive? What prevents us as legislators from passing some sort of law to keep those folks within some sort of regulatory framework?

Mr. Fowler. If the tax is too low, Mr. Cooper—it's a good question and a lot of people thought about that. Two points.

One, we don't think you can practically mechanically do it and, two, it's bad policy overall for the national good.

Someone made the point that if you had adopted a tax that was a very high tax, that would have effectively precluded the use of other technologies or the same technologies in bypass modes, we would not have the following technologies today if the Congress had made this decision in the early 1970's. You would not have cable television, cellular radio which is telephones in cars, we would not have satellite technologies being used to the extent that they are used today, and there are several other technologies.

In other words, when there are new and more efficient technologies that come along, we want to encourage their use and typically the way they first start being used is through private systems and then ultimately, if they prove their worth, they're used in the public telephone network.

We don't want to discourage that kind of technological innovation by saying you can't use technologies that are more efficient or cheaper in order to transmit information and data. I think that would be very poor policy.

Now if a tax is set very low, it's not going to discourage bypass. It will simply reduce the cost savings but it would still, on a net basis, be a good decision to go ahead and abandon the network.

What it comes down to, and I'm simplifying here greatly in the interest of time, is the best way and the only way we can really devise, therefore, is to try to bring down the costs of the provision of services in the long distance network to approximately what their costs are in order to encourage as many users as we can to continue to stay on the network, thereby generating the revenues to keep everybody's phone bills low.

The other point I wanted to make was that as a result of our recent decision on the business access line charge or subscriber line charge, it was possible by the shift of costs to provide all of the American people with a 6.1 percent reduction in long distance, and do we want now to reverse that? That is a benefit that flowed directly from our recent decision here.

Mr. Wyden. The gentleman from Louisiana.

Mr. Roemer. Thank you. We've got a banking committee markup that Mr. Cooper and I have to go to.

Quickly, the argument that reducing the long distance charges helps all Americans is a little bit like TWA saying that they lowered the price of a one-way ticket to Poland and therefore everybody here ought to feel the benefit of that.

Many of the people who live in my north Louisiana rural area are not heavy users of long distance, so the important savings there are not uniform in their application across my territory and, of course, you know that. We're just disregarding it in this debate.

Number two, your points about the idea that telephone charges are really underpriced over time given the effects of inflation, and you've given several interesting statistics to support that, ignore completely the advance of technology in the system over that same period of time. Let me give you an analogy, if I could.

If you went down to the local store to buy a television set, you would not pay in any comparable way the same dollars you would have paid in 1952 for that television set. Technology has brought a savings to the American people, not your Commission or this Congress.

Finally, I'm yet to be convinced that the skewed arrangements of toll fees—that is, disproportionately large toll shares at the top of the line—if we were to lose those through bypass I'm yet to be convinced that the new charges that we're talking about are dollar for dollar to replace that threat.

The second thought that comes to mind is, so what? I would rather suffer the slings and arrows of competition as it advanced through bypass than what we're forcing on the American people.

Now I know I'm probably wrong in all these thoughts and I would like you to respond.

Mr. **Fowler**. Well, the concerns that you express, Mr. Roemer, are certainly very valid concerns and they've been shared by a lot of people, including me and the commissioners, because the one thing we don't want to do destroy our universal service. That is one of the touchstones of our decision. We share the same concerns that you share that we've got to try to keep local telephone rates as affordable as we can. The question is how do we do it. That's really the question.

Now as to your point on technology, it is very true, sir, that technologies have provided enormous efficiencies in the telephone network, but unfortunately as to the local exchange services the technological advances have not been that great in terms of providing dramatic cost reductions.

In fact, the costs for local telephone service have been steadily marching upward. The real breakthroughs have come in the provision of long distance transmission.

Mr. **Bedell**. Would the gentleman yield?

Mr. **Roemer**. I'll be glad to.

Mr. **Bedell**. Are you saying that automatic dialing has not improved the efficiency of local telephone service?

Mr. **Fowler**. No, sir. I'm saying it has but it hasn't as much as some of the increased costs that have gone along with providing local telephone service.

Mr. **Bedell**. I'm seeing indications that if we still had the old type of telephone service where the operators had to ask your number and punch in the pegs, that we would have almost everybody running a telephone service. Am I wrong in that understanding?

Mr. **Fowler**. I'm sorry, sir.

Mr. **Bedell**. Am I wrong in that understanding that there has been a tremendous improvement in the cost of local telephone service, where we no longer have to have everybody sitting there at a desk and——

Mr. **Fowler**. I don't know the answer to your specific question.

Mr. Bedell. I should think you would know. In your position I would think you would have some idea of what has happened.

You just told us that there hasn't been any improvement in local telephone service. I submit anybody is absolutely off their rocker if they think there has been no improvement in efficiency of local telephone service since the days when people had to sit there and punch cords into holes and ask your number please in order to give somebody a number.

Mr. Fowler. Well, what I'm saying, and I don't think you stated what I said correctly.

I didn't say that it might not have caused some efficiencies because I think it has. I don't know exactly what the extent has been. I can't give you that number.

Mr. Roemer. You minimize the effect of technology in local systems.

Mr. Fowler. I'm talking here, sir, about—Mr. Roemer, I'm talking basically here about the cost, remember, of that local wire and that has not changed significantly at all. In fact, it's gone up. The cost of copper has gone up. The cost of labor to maintain the local loop has gone up. The cost of installing telephone poles has gone up.

That's what I'm talking about as to our access charge decision. How do you recover the cost of the local loop portion of local telephone exchange service.

Mr. Roemer. Well, you have trouble. I appreciate your answer. I disagree with it, but I appreciate it.

Mr. Fowler. It's a very hard area, sir.

Mr. Roemer. It is, particularly for a guy like me.

I'm still concerned, genuinely concerned, about the statistics that you throw around like darts about the skewing of the toll load and what the result will be for those of us at the bottom end of the scale, and I have yet to be convinced—and I would like to be—of your action.

Is it comparable to the threat, your action. Is it statistically proportional to the problem that you see in the real world? I just don't see that yet.

Mr. Fowler. I can give you a very general answer now and I would be happy to supply you with backup information.

Mr. Roemer. If you would do the backup, I would really appreciate it, because my time is out and I've got to go save the banking world now that we've handled the telephones.

Mr. Fowler. I hope they're in better shape.

Mr. Roemer. Me, too.

Mr. Wyden. Thank you, gentlemen.

The gentleman from Wisconsin.

Mr. Roth. Thank you, Mr. Chairman.

I have an opening statement, Mr. Chairman, that I would like to enter into the record.

Mr. Wyden. It will be done.

Mr. Roth. Thank you, Mr. Chairman.

[Congressman Roth's prepared statement follows:]

OPENING STATEMENT OF HON. TOBY ROTH, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF WISCONSIN

The telephone is one of the most important tool a small business has in its possession. Telephone calls to and from customers, suppliers, and other needed services are the lifeblood of any small business.

However, since last fall there have been numerous signs that with the breakup of the communications monopoly, an undesirable effect may occur in respect to small business. Instead of reducing phone costs and providing a better service, it is quite apparent that most small-business people will have to pay more for their local phone service.

Through my own investigation into this matter I have found that the "access charge" for small business phone lines is the core of this problem. This charge that AT&T imposes—and I might add with FCC approval—is just an extra burden on the small businessperson, who many times in trying to cut costs in the first place.

In a "straw poll" taken by my office, 38 out of 50 business representing 13 counties in Wisconsin opposed the imposition of these access charges. Furthermore, many respond to this poll by stating that with this access charge they (the small business) would cut back on phone service, which ultimately would result in a drop in business growth and overall productivity.

Mr. Otto Bytof, an Appleton, Wisconsin realtor, has stated that at $6 per phone, his 26 phone lines plus access charges will cost him an extra $156 per month, or $1,872 per year. This is money that could be better used elsewhere in the development of his business.

I would like to recommend that the FCC rescind the access charge decision and wait for the findings and recommendations of this task force. I believe that this task force, under the leadership of my colleague Mr. Wyden, will effectively examine this situation and come up with some alternatives to excessive access charges.

Mr. ROTH. Mr. Fowler, the FCC has ordered a 6.1-percent across-the-board reduction in long distance telephone charges.

Since most of the small businesses in this county depend on local service, not long distance service, isn't an access charge an unfair burden on the small businesses.

Mr. FOWLER. Again, Mr. Roth, what we're concerned about is preserving affordable local telephone service, the very thing that I think you're concerned about, and this is a first step in trying to move toward a system that with the most certainty will assure that we preserve affordable telephone service.

We will be looking at the residential subscriber question later this year so this is a kind of a first step and in this regard for most people their telephone bills as a result of this 6.1 percent reduction are less.

Now for businesses who now have to pay $6 per line or a maximum of $6 per line, in some cases they may be better off, depending on their long distance usage, or they may not be as well off, or they may be about the same.

One other point I wanted to make that I think is important, sir, is that we said that the customer line charge for multiline business users may not exceed $6 per month but our figures indicate that the average charge, if you average the 50 States, will be about $4.75 a month. In some States it could reach the $6 cap, but the average is about $4.75 per month.

Mr. ROTH. Well, I'd like to agree with you but obviously when you say the telephone charges for the average user are less, I couldn't buy that unless I misunderstood you.

Mr. FOWLER. In Wisconsin, for example, the business line charge will be $3.68.

Mr. ROTH. $3.68 for the access charge?

Mr. **Fowler**. Yes, sir. In other words, $6 is bandied around here as what every business is being we assessed.

Mr. **Roth**. OK, $3.68. In Wisconsin will have an expected 17-percent dropoff in the system.

Mr. **Fowler**. A 17-percent drop?

Mr. Roth. Yes, and now AMERITECH is toying with the idea of raising it another $2.10 by September 1.

Mr. **Fowler**. I haven't seen this, sir, but I would be very interested in——

Mr. **Roth**. I'm from Wisconsin and you can take my word for it.

Mr. **Fowler**. The reason I wonder is we just put that into place only in the last month I believe it showed up in bills, so you're saying that in the last month there's been a 17-percent decrease?

Mr. **Roth**. The information is that there will be a 17-percent dropoff, yes. Fine. AMERITECH is toying with the idea of raising the access charge another $2.10 by September 1.

I submit that we are not really helping the people. This altruistic example of we want to make sure the average telephone user in this country is being fairly treated. I don't think the average telephone user in this country is being fairly treated. I'm sorry but that's my opinion.

Mr. **Fowler**. That figure you gave, do you know whether that involves, let's say, a business that has 10 lines going to 8 lines so that is a disconnect, or is that eliminating subscribing to local telephone service altogether?

Mr. **Roth**. I know in doing some research for this hearing I was asked by our chairman to get some local input. I did contact, for example, our realtors—I happened to have been in the real estate business before I came to Congress—and we do have a $6 per line charge, yes.

Mr. **Fowler**. But that's only $3.68 in your State.

Mr. **Roth**. It's $3.68 going up $2.10 supposedly by September 1.

Mr. **Fowler**. You mean caused by State decisions?

Mr. **Roth**. Yes.

Mr. **Fowler**. I'd like to get that information.

Mr. **Roth**. I would be happy to share it with you, sir.

Thank you, Mr. Chairman.

Mr. **Wyden**. The gentleman from Missouri.

Mr. **Skelton**. Mr. Chairman, thank you for being with us today. I fully appreciate and I thank you for the presentation that tells us about the problem. I think you explained it right well. You told me about the car having the flat tire. I just think you fixed the wrong tire, not the flat.

Let me see if I understand the order that went into effect on May 25. First, you put off for 1 year access charges on residences and small businesses that just have one phone line. Is that correct?

Mr. **Fowler**. Essentially that's right, yes, sir.

Mr. **Skelton**. And you also allowed large firms—let's pick on Sears and Roebuck—who have potential to set up their own bypass system to have lower rates. Is that not correct?

Mr. **Fowler**. It provides everyone who uses MTS and WATS will realize a 6.1-percent reduction. That is all subscribers, residential as well.

Mr. **Skelton**. But who can take advantage of it? It's usually your large operations that can set up a bypass system, is that not correct, that can really take advantage of this?

Mr. **Fowler**. Yes. The bypass threat is posed by large users. That's right.

Mr. **Skelton**. Your 6.1 percent, I understand that. That was not responsive to my question.

My question is, you allow by your order, those who pose a bypass threat, which are your larger operations—the Sears and Roebuck types—you allow them to have a lower rate, is that not correct?

Mr. **Fowler**. That's right.

Mr. **Skelton**. To keep them in the system.

Mr. **Fowler**. That's right.

Mr. **Skelton**. So what you have left are your small businesses that are multiline, is that not correct?

Mr. **Fowler**. That's correct.

Mr. **Skelton**. It's very difficult for me to understand why the Maid-Rite Drivein with two telephone lines has to pay a disproportionate amount of money in these access charges because he has two telephone lines to keep the Sears and Roebuck type of people in the system.

I think that you have a serious problem here in small town, rural America, and I think you're going to see a trend from the Maid-Rite Driveins that have three lines or two lines, or the small accounting firm, the Ben Franklin store that was referred to, cutting back on their lines.

I just wonder if you're not cutting off your nose to spite yourself because they will get along on less lines and they will not—I don't think they'll keep the large number of two, three, four, five lines in that they have now.

Now let me ask you, do you have a copy available for us that the FCC did of the nontraffic sensitive audit?

Mr. **Fowler**. We can get that for you, sir.

Mr. **Skelton**. You have that and we would appreciate a copy of that, please.

Mr. **Fowler**. Yes, sir. That was information that was compiled as a result of information supplied to us by all 1,400-some independent telephone companies plus the regional Bell operating companies.

Mr. **Skelton**. No, wait a minute. You did not do an audit yourself?

Mr. **Fowler**. We did a study on what nontraffic sensitive costs are as a result of gathering this information from——

Mr. **Skelton**. Is this your study or is this a compilation of the other studies?

Mr. **Fowler**. We put it together from the sources that provided the information.

Mr. **Skelton**. All right, so you did not do your own study then.

Mr. **Fowler**. Well, we did our own study but we had to get the information from the phone companies to do it.

Mr. **Skelton**. Whatever it is, would you get that to us?

Mr. **Fowler**. Yes, sir, I'll be glad to.

Mr. **Skelton**. Thank you.

Mr. **Fowler**. Mr. Skelton, if I could, just one point I would like to make is that Sears is also paying, too. I mean they're not exempt from this and this is the first important point.

The second important point is that if over a period of time we see a skyrocketing of local telephone rates—residential subscribers might be able to disconnect, but those local small businesses are not able to and still stay in business and that's another reason why they are truly captives. They truly have to continue to have phone service or they're out of business, so more than most people small business is going to benefit from our actions which will preserve affordable local telephone service, and if we don't go this way we're going to have some big problems at the local level and you can't avoid that, and the Congress can't avoid that. It's a fact of life, I'm afraid.

Mr. **Skelton**. I can't quite see your logic, but I appreciate your fine testimony.

Mr. **Fowler**. I appreciate your concern, sir.

Mr. **Skelton**. I'm really concerned about small town America. This really bothers me a great deal to see them pay the bill that really they should not be paying and they've been singled out by your Commission.

What's going to happen after a year? Are you going to go back on the single-line small business? Are you going to go back on the residential? What about them? They're just out in limbo for a year. We haven't solved their situation. What about them? Are you going to pull them in, also?

Mr. **Fowler**. We're looking at that and we think that it's a direction that we must proceed in, yes, sir, because if we don't we've got a horrendous national problem as to affordable telephone service.

Mr. **Skelton**. So all of this is based upon the bypass threat, is that correct?

Mr. **Fowler**. That is one of the main elements of our concern.

Mr. **Skelton**. You say that's one. What else is there besides the bypass threat?

Mr. **Fowler**. That is the big threat, the bypass threat.

Mr. **Skelton**. If we solve that problem then we're going to have affordable service to small businesses in Lexington, MO?

Mr. **Fowler**. There is another important point. We want to encourage the efficient use of our national telephone network. It is not efficiently used. It is not used as much as it should be when you have costs loaded in there that don't belong in there and that relates to losses in national gains for America.

The ones I alluded to—creating those 400,000 new jobs, reducing prices by about one percent—are important things for the people of our country and these are benefits we will lose if we don't go along the course that the agency has embarked upon.

Mr. **Skelton**. Thank you.

Mr. **Fowler**. Yes, sir.

Mr. **Wyden**. The gentleman from Iowa.

Mr. **Bedell**. Mr. Chairman, are we going to have another run on bypass?

Mr. **Wyden**. We certainly are, with the chairman's time permitting.

Mr. **Bedell.** Mr. Fowler, you have cited quite a great deal of figures from the Perl study. Who financed that study?

Mr. **Fowler.** I think the Bell System did that one, sir.

Mr. **Bedell.** Is this the way your organization normally operates if you want to investigate something? If you were looking at oil problems would you ask Exxon Petroleum to run a study to see what you ought to do about oil, or if you were looking into chemicals would you ask Dupont to do a study to tell you what you ought to do about chemicals, or if you were studying retailing would you ask Sears and Roebuck to do a study to determine what you ought to do about retailing?

Is that the policy of this administration, Mr. Fowler?

Mr. **Fowler.** Mr. Bedell, I would point out that we had a public record. We received many studies. This was only one of many. This was the most exhaustive one.

Mr. **Bedell.** But the one you're using and the one you quoted to us is by AT&T. Don't try to fool anybody. If you had other studies, why is it you didn't pay some attention to those studies?

Mr. **Fowler.** We did. We looked at all of the studies.

Mr. **Bedell.** But that's not what you've quoted to us, Mr. Fowler. You quoted to us the study that was financed by AT&T.

Mr. **Fowler.** The question is whether or not it is a valid study. The question is not what the source is.

Mr. **Bedell.** The question to me is what the source is. It's my time, Mr. Chairman. I think if we've got a Government that is asking suppliers to the military to tell them what they ought to do for the military, and if we've got AT&T telling us what we ought to do about telephone rates for my small business person in Spirit Lake, IO, a small town, and if we've got an administration that condones these practices, I think this committee has a good reason to be disturbed over more than just the problem we're talking about today.

I can tell you I'm just plain upset by your testimony. You tell us quite clearly that all small businesses are not in financial difficulty. That's absolutely false. What you're really saying is that we shouldn't worry about the 31,000 small businesses that went bankrupt last year. I think that ought to be a concern.

I don't think I'm a particularly partisan person. I used to be a Republican, but I'm telling you we have this administration come before us time after time after time, we get exactly the story you're telling us, that we ought to worry about Sears, Roebuck and we ought to worry about Exxon Petroleum and we ought to worry about Dupont and all the big companies because it's going to be better in the long run.

I'm telling you there's a problem out there in rural America. I've got a terrible problem in my district. I've got small businesses that are going broke in large numbers. To those people this is a serious problem. Apparently, you don't recognize that.

You say that since Iowa has only 1 percent of this country's telephone users that you don't have to worry about that 1 percent. My people think you can't just worry about the other 99-percent but you also have to worry about that 1 percent of people from Iowa that need the service the most.

It's very clear to everybody that wealthy people make more long distance calls than the poor make.

Mr. **Fowler**. That's not clear at all.

Mr. **Bedell**. Well, it certainly is clear to me. If you would know the people in my district that can't afford to make a long distance call, and if you think that that's not the case then for God's sake you've got to get out among the people, Mr. Fowler. That's the concern I've got.

Mr. **Fowler**. Mr. Bedell——

Mr. **Bedell**. Let me finish, sir, if I might. It's my time.

The concern I've got is that in my opinion we've got an administration that is much more worried about the big business people than they are the small business people.

I've got one question to you. If it could be shown that it was quite clear that your actions benefit big business at the expense of small business, would you consider changing your regulations?

Mr. **Fowler**. Yes, I would, and that's not the case. Now, Mr. Bedell, I'd like to respond, if I could, because you made a couple of statements there that I think I would like to respond to.

The most important one was that you said that the administration favors big business over the little people.

Mr. **Bedell**. I sure did.

Mr. **Fowler**. Well, the fact of the matter is that the administration's policies and the agency's policies that foster competition and promote technological change have mightily served the common-man in our country and I'll give you some examples.

Mr. **Bedell**. Are you talking about small business?

Mr. **Fowler**. I'm talking about all Americans.

Mr. **Bedell**. I'm talking about small business, Mr. Fowler. That's what we're here for.

Mr. **Fowler**. I'm talking about all Americans, including small business people.

Mr. **Bedell**. Talk about small business, if you would, please.

Mr. **Fowler**. We have promoted competition in providing telephones. That is, you can go out and buy telephones now. The same people raised a hue and cry and said this would be terrible for the consumer, it would be a terrible day for the American people.

What are the results so far? It used to cost $40 to lease a phone from the telephone company. You can now buy a phone for $19.95.

Mr. **Bedell**. You think that's a great benefit to small businesses, that they can now buy their telephone?

Mr. **Fowler**. It's a great benefit to the little person in our country.

Mr. **Bedell**. We're talking about small business, Mr. Fowler. I would appreciate it if you would keep it on the issue of small business. That's why we're here. That's what we're concerned about. I think we've got a legitimate concern.

Mr. **Fowler**. Mr. Bedell, you've got to let me answer, sir, as a matter of——

Mr. **Bedell**. I will, but you should answer for small business, sir.

Mr. **Fowler**. I am answering for small business.

Mr. **Bedell**. No, you're not. You're talking about the general public and that's it.

Mr. FOWLER. To the extent that small businesses encompass the American public, I'm talking about small business.

Now my next point is in airline deregulation, although there were some dislocations at the time when we went from a heavily regulated industry to one that was not regulated, the fact of the matter is that airplane fares are down an average of 22 percent, and the 74 communities that initially lost service from large carriers now have more flights and more service overall than they had then.

Mr. BEDELL. Mr. Chairman——

Mr. FOWLER. The commonman again is better off than they were before.

Mr. BEDELL. Why, Mr. Fowler——

Mr. FOWLER. Banking is another area where the small person has——

Mr. BEDELL. Mr. Chairman——

Mr. FOWLER [continuing]. A chance to invest in——

Mr. BEDELL. Is it my time, Mr. Chairman, or not?

Mr. FOWLER. And in our area long distance rates are coming down because of competition.

Mr. BEDELL. Mr. Fowler, I want you to know that my small business people out there in the hinterlands aren't concerned about airline fares because they don't have the money to fly on the airlines.

Believe me, if you could get out and see my retailers in my area, you would have a completely different perspective than apparently you have.

If you think airline fares are the big issue among my small business people, I'm telling you you haven't been out there.

Mr. FOWLER. What about gasoline? The President's decision to deregulate gasoline brought prices down to almost a dollar a gallon in early 1983, sir, when it was $1.50 before.

Mr. WYDEN. I think we could engage in our economic debate about airlines and gasoline and a variety of things. I think we want to confine our remarks to small business and if the gentleman wants to proceed with one additional question, please go ahead.

The gentleman from Texas.

Mr. STENHOLM. Thank you, Mr. Chairman.

Would you define your concept of universal service?

Mr. FOWLER. Yes, sir, and that's a very good question. Generally, we define universal service as having 90 to 95 percent of the households in this country employing and realizing local telephone service.

That's what the level is approximately today. You'll probably never, they tell us, theoretically have a hundred percent but we have between 92 and 95 percent. It varies in some States. In some States, it's as low as 86 percent, I believe, but the average overall is between 90 and 95 percent.

Mr. STENHOLM. What effect do you see the FCC actions, the actions that have caused this task force to be formed, having on universal service in the next 10 to 20 years?

Mr. FOWLER. Well, from the best evidence we have now, sir, and we're going to gather more this year, to do frankly a better job before we address the question of residential subscriber line charges, is that we will have no significant dropoff over the next several years, and by that I mean through about 1990.

We are projecting, according to the results of our Michigan study, about a 6-percent annual increase overall in telephone rates as a result of Federal decisions through 1990, and according to our studies this would not result in any significant dropoff.

Mr. STENHOLM. Does the 5 to 10 percent that you do not include in your definition of universal service include rural areas, and would you go a little bit more into detail as to your vision of telephone service for rural America in the next 10 to 20 years as a result of the policies you are advocating to this committee?

Mr. FOWLER. Yes, sir; I don't know exactly what the figure is for rural areas versus urban areas, sir. I'm not sure that has ever been broken out.

We do know that we have a longstanding commitment to preserving affordable telephone service in rural areas as well, and that is the reason why in our decision we did create a subsidy of about a billion dollars to target assistance to rural—to high cost but typically rural telephone companies in order to make sure that rates in those areas are still affordable, so we targeted your concern specifically.

Mr. STENHOLM. Are any studies available that will tell you what we can expect in the next 5 to 10 years as a result of the policies that you have been advocating and defending before this committee this morning?

Mr. FOWLER. Yes, we do, and one thing I wanted to mention was that we had a series of five regional hearings in which we heard from very small rural telephone companies. This was done in 1982, sir, to assure ourselves that the course that we were embarking upon would preserve affordable phone service in rural areas.

One of the things that consumer groups and representatives of those small phone companies pointed out to us time and time again was the need for the Commission to target assistance to those phone companies in order to preserve affordable phone service, which is what we did in our decision.

Mr. STENHOLM. In your personal opinion, what is more important for the Nation—long-distance rates competitively priced, or local rates reasonably priced?

Mr. FOWLER. I think they're both very important and I don't think you can say that one is more important than the other.

Now in certain circumstances people may say that one is more important. For example, I think it's important for people to be able to call their mother who may live far away, or for loved ones in modern-day America to be able to communicate within their family, one to the other.

I think it's very hard to choose one over the other. I think it probably depends on the individual circumstance. I think they're both important.

Mr. STENHOLM. Are you saying that the actions that you've taken to this point are fairly and evenly balanced between local- and long-distance service and the philosophy that you're advocating as a result of the breakup is balanced?

Mr. FOWLER. Yes, sir, for several reasons. One of them is that in looking at subscriberline charges, for example, for residential users, one of the things we indicated we would most carefully consider was a smooth transition, that is that we don't suddenly load all of those costs on residential subscribers but instead that the transition is done over several years to prevent rate shock and dislocations.

We also again are concerned with preserving affordable telephone service and obviously unless you are able to subscribe to local service you're not able to obtain either local- or long-distance service.

Our key point here, whether you weigh long distance or local more one way or the other, the key point is you want to make sure that Americans will still be able to afford phone service, local and long distance.

Mr. STENHOLM. I'm troubled about the 5 to 10 percent that you exclude from your definition of universal service. Could you amplify on who those people are that you believe should not be covered by a national policy of universal service?

Mr. FOWLER. Sir, I'm told that primarily that group who don't have telephone service is single men who—Janice I guess got this from a study which she personally did.

Mr. STENHOLM. It wasn't commissioned by Bell?

Mr. FOWLER. No, and she didn't get any calls from them, either. I want to make that clear. And in some rural areas where it is just physically impossible, very remote rural areas, in canyons where you can't get any kind of a service in, although we're working on that with some satellite proposals that are pretty interesting that would provide telephone service by way of satellite and dishes on a lot next to the house.

Mr. WYDEN. Mr. Chairman, first I want to thank you for giving us all this time. I'm going to proceed with another round, just a few other things that I think are important. We're just very appreciative of you giving all your time. I think it's fairly obvious that this is a subject about which members feel strongly and we appreciate your being here today.

I think that all of us, Mr. Chairman, would stipulate to the fact that almost everybody in America benefits a little bit from long-distance rate reduction. I think it's clear some benefit very little and other people benefit tremendously, but everybody—and I'll just flat-out stipulate almost—benefits a little bit from long distance rate reduction.

The question that I've got for you is wouldn't long-distance bills in this country come down without access charges? This is the competitive part of the market.

You and I and everybody else goes home and we see Cliff Robertson and Andy Williams and everybody just tripping over themselves every night to blast us with television commercials. It's obvious that this is the lucrative part of the market and there is tremendous competition between AT&T and GTE-SPRINT and MCI and on down the alphabet.

My question to you is, wouldn't we have long-distance rate reductions in this country even if we weren't digging into the consumers' pocketbooks and forcing them to pay just for the privilege of having the opportunity to make a long-distance call?

Mr. **Fowler**. Well, I think the answer is as follows. First of all, with increased competition in long distance, it may well bring prices down. We don't exactly know how that's going to play out because we're not——

Mr. **Wyden**. Let me follow up right at this point. You dropped the rate 6.1 percent for AT&T. Couldn't there have been a 6.1 rate reduction even without access charges just because of the competitive nature of the market?

Mr. **Fowler**. It's hard to really answer that question. The short answer is that by reducing the cost that AT&T pays, through this decision they were then able to reduce long distance 6.1 percent and still achieve their legal rate of return.

Now it's up to them as competition ensues here if they want to further decrease their rates.

I see that in response to our decision as to AT&T, MCI lowered its rates by a like amount of 6.1 percent, so you may be very right that the competitive process will put the pressures downward on long-distance rates to some extent.

Mr. **Wyden**. Let's follow up right there because it would seem to me that if long-distance rates were going to come down anyway, shouldn't you have given that process a chance to work before you force the consumers to dig into their pocket and pay billions of dollars in access charges?

It would seem to me that you would say definitively, no, Congressman Wyden, we couldn't have had long-distance rate reductions without those access charges so we had to go ahead and it was too bad but we had to do it.

But you've told me we probably could have had those long-distance rate reductions anyway and we don't even know whether access charges contributed to those long-distance cuts.

Mr. **Fowler**. Mr. Wyden, you've got carriers who have certain costs, and these costs that they're paying, what we call carriers' carrier line charges—carriers' carrier charges which are paid when they hook up to the local exchange.

Now it's very difficult for any company to price its services below cost for very long, and these costs that we're proposing to shift we think will permit about a 35- to 40-percent overall reduction in long distance, but if you don't shift those costs out we will not realize that kind of reduction.

I don't think, although we haven't quantified it yet, that the competitive process by itself could result in those kinds of reductions in long-distance rates.

Mr. **Wyden**. We have had a 6 percent rate reduction up to this point and you have indicated in your answers to me that we might have had a rate reduction anyway even without access charges. It seems to me that the burden is on the agency, particularly when it is forcing consumers to dig into their pockets, to show some clear convincing evidence rather than what you said today, which was, well, maybe, maybe not, and we have a small rate reduction that might have happened anyway without the access charges.

Mr. **Fowler**. I think the answer is that obviously the greater the reduction the better off everybody is. If we can, through our policies, reduce long distance 40 percent and the competitive process results in another 5- or 10-percent reduction, that's all to the good and even better.

At the same time, though, you've still got this bypass problem. If you were just to simply rely on the competitive process and keep that 15 cents per minute charge in long-distance rates, you would have done nothing to discourage bypass as a result of loading toll rates.

Mr. WYDEN. We are thinking telepathically because that's the area I wanted to go to next and, of course, you and other defenders of access charges trot out the bypass threat as public enemy No. 1, that that's really the justification for all of this.

In my State, for example, the biggest bypasser is Tektronics Corp., by far the biggest employer in the State. They have said at congressional hearings that they specifically bypass for service reasons, not for any reason relating to price.

I think my first question to you on the bypass issue is can the FCC document or give us one single case of where bypass led to a rate increase or stranded investment in this country?

Mr. FOWLER. Yes, indeed, I can give you more information for the record, I can't give it all to you now.

In New York State, for example, they've had to take action because of a very serious erosion in revenues caused by what is becoming massive exoduses from the public switched network and going to private systems with a teleport being built right there in New York to encourage businesses to bypass and use alternative technologies.

Mr. WYDEN. I would be happy to see any anecdotal evidence but I think you know the only analysis, the only formal analysis done on this bypass issue was the one done by Southwest Bell and their findings were that the primary reason people bypass were for reasons of service, rather than for reasons of price, so we have only one study at this point and that study is one that contradicts your conclusions.

Now I would like to ask you about the question of local bypass.

Mr. FOWLER. Mr. Wyden, could I just respond to the one point you made? We did do a study which the Court of Appeals specifically referenced which showed that bypass was occurring primarily as a result of loading toll rates with costs to keep down the cost of local telephone service.

We are compiling an even more comprehensive record this year on bypass, as you may know, sir, so we can better quantify the nature and extent of bypass, but it is quite clear that it is occurring and it is accelerating.

The problem is if we study this to death over several years and have a large number leave they are lost forever and it's too late to get them back. They've made their investment in their very expensive private system. There is some reason to proceed with some speed.

Mr. WYDEN. The question is, how widespread? The evidence in my State is that the bypassers are going for service reasons, not because of price and our largest bypasser has testified to the Congress on that.

Second, are we going to use this fear which may or may not be founded, to skew the whole system in favor of that 6 percent of the major users that you continually say if we don't have with us, the whole system is going to collapse, so I'm anxious to have your study.

I'm very concerned about local bypass. You've told us here today that we would have a 100-percent increase in local phone rates in this country in the next 3 years. What about the problem of local bypass, where local phone rates get so high people bypass the local system?

Mr. **Fowler**. Well, I think that the short answer there, is, that although local telephone rates are going up to some extent they're going to go up a whole lot more if we don't address bypass.

This is going to happen whether we act on bypass or not because of increased local telephone exchange costs, inflation, rising labor wage pacts that have been negotiated with unions. All of these things are components that tend to cause the cost of local exchange services to go up, and most of them, or some of them I should say, are beyond the control of this Federal agency.

Mr. **Wyden**. I just have to be amused at how dire the threat has become of bypass ever since Congress began to initiate legislation in this area.

I know that I used to give speeches for years that said that long distance was over-subsidizing local service, and I thought that we ought to cut by about 50-percent the amount that the long distance people were paying back to the local service operations and everybody in the telephone industry clapped like crazy. They thought that was tremendous, and we had a lot of testimony that if there was a 50-percent reduction along those lines that that would eliminate the threat of bypass.

Then along came Chairman Fowler who said that the long distance companies wouldn't have to pay a penny and everybody thought that was a better deal, so when they heard they wouldn't have to pay a penny, we saw reincarnated the great and dire threat of bypass.

We are very anxious to have your studies on this point and I want it very clear that I think the principal reason people are bypassing in this country is mostly service. I think price is a factor but it's mostly service.

Mr. **Fowler**. Mr. Wyden, the thing I would say there, sir, is we will have a much more definitive study as you suggested you would like to obtain, and when we do I will forward that to you post haste.

Mr. **Wyden**. Well, that would be good. I sense a real pattern in all this that we'll stick the charges to the consumers now and then we'll have a study later on to see if it makes some sense.

Mr. **Fowler**. Sir, we've already done one study. The point I wanted to make is we have already across the board provided a 6-percent reduction in long distance rates for everybody, all Americans.

Mr. **Wyden**. I'm going to ask one last question and then I'm going to yield to the gentleman from Wisconsin.

Mr. Chairman, I understand that the access charges are going to eventually shift about $11 billion from long distance to local charges, $11 billion as part of the $40 billion in nontraffic sensitive costs.

Could you just break down for us the elements in nontraffic sensitive costs?

Mr. **Fowler**. Do you want me to break down the $11 billion figure or are you talking about the costs themselves, the nontraffic sensitive costs?

Mr. **Wyden**. The costs themselves in nontraffic sensitive costs because that's the issue.

Mr. **Fowler**. I can't give you the exact figures. My figure was that we had about $44 billion in nontraffic sensitive costs. I can generically describe what most of that is.

Most of that is the local loop and the telephone wires and costs that are attendant with maintaining that plant. That is essentially what nontraffic sensitive costs are.

Mr. **Wyden**. Perhaps you could give us a more detailed breakdown. The issue is how we are going to allocate these costs and allocate them fairly.

Mr. **Fowler**. The fairest way it seems is to allocate them to the person who causes the cost. If you can't afford it because you're too poor, we have a provision for that. If you're in a rural area, we targeted assistance to make sure that the costs stay essentially on average with people in urban areas.

Everyone else, residential and business alike, if they generate a cost and impose a cost, they make a cost, they create it, they ought to pay for it.

Mr. **Wyden**. You have essentially made the case again for a two-class phone system and I think that would be a very, very sad state of affairs, Mr. Chairman.

I'm going to recognize my colleague, the gentleman from Wisconsin, at this time.

Mr. **Roth**. Thank you, Mr. Chairman.

Chairman Fowler, in all these hearings and all the issues that come before us, there are always issues that we discuss and always what I would call subterranean issues, perceptions we have, and to get ready for this hearing I did talk to our people back in Wisconsin, the realtors, small business people and the like, and there is a feeling in this country that the telephone companies are a lot like the Pentagon—costs just keep going up and up and up and the people just pay, pay, pay, and I think this is what the American people are really disturbed about.

Now it's true that in Wisconsin where we have the $3.68 access charge, and that's going to go up $2.10 September 1. You and I are going to work on that because we're going to get our facts straight on that. Then I think it augers very negatively for the local user in June 1985 if this is an example of what the local people are going to have to pay.

I disagree with you on this point. I don't think that telephones today are a luxury. I think telephones are a necessity, so you're not going to get the local person to say, well, telephone costs have gone up, I'm going to disconnect my telephone, because telephones today are a necessity, not only for business but for every household in America.

I think that's where our problem comes, I think that's why we're concerned, because we feel that people in the business, the telephone companies, really are not sensitive to the needs of the local people, of the American citizen, of the local household.

Mr. **Fowler**. Mr. Roth, I understand your concern and basically what you are saying, sir, as I understand it, is look, I'm very concerned about the costs of local telephone service and they just seem to keep rising and rising and rising and, if I can't make any other point here this morning, I share that concern.

The problem is that there is no magic in this. We've got these costs that are generated and they've got to be apportioned equitably and fairly and if we don't do that we're going to have a much higher cost and I guess I sound repetitive now.

One point I wanted to make, I think was a very interesting point, the real cost of telephone service, at least through 1983, had actually reduced 31 percent since 1971.

Mr. **Roth**. Chairman Fowler, it's not my intention to get into a debate with you. I just want to make this point and I think it's very important.

How we draw the lines is very important. Yes, I know that the costs have to be paid. There is also a responsibility on the part of the telephone company to keep the costs down.

The other thing is you had mentioned, and I believe now I'd like to agree with you, that transportation airline tickets have come down. I can't agree with that and I'm going to tell you why.

When I first came to Congress in 1979 a roundtrip ticket back home to Appleton-Green Bay, WI, cost me $216. Six months ago, that cost was $432.

The reason I remember those figures is because it has exactly doubled since 1979.

Mr. **Fowler**. Of course when you go to a competitive system some people are worse off, to be sure, Mr. Roth.

Mr. **Roth**. In that case I was worse off.

Mr. **Fowler**. But overall——

Mr. **Roth**. Mr. Chairman, what I'm concerned about is that that local telephone user is going to be worse off, too. That's my concern in this.

Mr. **Fowler**. And I'm saying, sir, that that is not the case under our plan. We project a 6-percent annual increase through 1990 as a result of our FCC plan, which is I think a rather modest increase. We don't see skyrocketing local telephone rates if we follow the route the Commission is embarked upon. If we don't, then we have an entirely different set of problems that are pretty serious indeed.

I share the concern you have. The question is how do we solve it, and it is a problem and we are going to have to address it and we can't wait very long.

I don't believe that America can afford to lose this debate. This is a very important one in terms of the great national benefits that I spoke of earlier, the creation of 400,000 new jobs.

Overall, most people will be better off. That's not to say that some won't have to pay more than they did before, but we have provided for truly poor people and for the rural high cost areas in that decision.

Mr. **Wyden**. The gentleman from Iowa.

Mr. **Bedell**. Thank you, Mr. Chairman, and thank the gentleman from Wisconsin. I think he kind of made my point.

Nobody is going to argue whether the total cost of airline fares have gone up or down. I think it's gone down for the person that's wealthy enough that they want to fly to Europe, but he's made the point.

The person that's living in rural Iowa or rural Wisconsin, if they have a death in Washington, DC, and they need to go for that funeral, the fact is that they're going to pay about twice as much to get there as they would have before deregulation.

I see the same thing happening in the telephone situation. You're very proud of what's happened in airline deregulation and understand the whole picture, apparently, you are also very proud of what you've done to the telephone industry.

I'm not here to argue whether total costs are going to go up and down. I'm here to tell you that, in my opinion, for the small business person what you are doing is a serious problem.

Airline deregulation was a serious problem for the person on limited income that lived in Wisconsin or that lived in Iowa.

You base everything on bypass, and the thing I don't understand is, you have put this extra charge on small business people. Is there a reason why when you addressed the problem of bypass, that you could not have simply put a charge on those people who are bypassing?

Mr. FOWLER. I think I addressed that earlier, sir.

Mr. BEDELL. What is the reason that you cannot assess a charge against bypass customers to cover whatever advantage you may see them having?

Mr. FOWLER. Well, if you discourage bypass to new technologies, what we call economic bypass, that is as more efficient technologies——

Mr. BEDELL. No, no. Nobody is asking that.

Mr. FOWLER. If I could just finish, sir.

Mr. BEDELL. Surely.

Mr. FOWLER. You then discourage the growth of new technologies and that is very undesirable, and the point I made earlier was there are numerous technologies we would not have today in the United States if we had had such a policy in the early 1970's.

Mr. BEDELL. The thing I don't understand——

Mr. FOWLER. We wouldn't have satellites, for example. We wouldn't have cable TV. So we want to encourage new technologies that are more efficient.

If you had a very low tax placed on bypassers, it probably would not be enough to deter them from bypassing. It would simply reduce the net savings that they would realize.

What you really want to do is to be able to encourage the use of new and efficient technologies which under our plan would still occur but over a period of time, a much longer period of time, not so quickly, and this would provide our public network the time to implant these new superior technologies into the public system, thereby better preserving universal service.

Mr. BEDELL. Do you understand why it is so confusing to somebody sitting up here in Congress when you tell us on the one hand that you have to put in these access charges because you're afraid of what bypass will do if you don't, and then you turn around and tell us you shouldn't do anything about bypass because we've got to be sure that we have an opportunity for new technologies to develop?

I would think someone in my position would be terribly confused by such testimony, Mr. Fowler.

Either you impose an access charge to discourage bypass, which I believe you just indicated to us, or you put it in for some other reason. If you didn't put it in to discourage bypass in spite of new technologies, what was the purpose of putting in the charge?

Mr. FOWLER. As I said, it's very bad policy nationally to have that kind of tax on bypassers for the reasons I mentioned.

The other point is that——

Mr. BEDELL. I thought you originally told us the purpose was——

Mr. FOWLER. The purpose, our purpose——

Mr. BEDELL. Let me finish if I might, sir.

Mr. FOWLER. You just asked me a question, sir.

Mr. BEDELL. I'm trying to not interrupt you.

If the purpose of this charge is to discourage bypass, which I thought you testified—is that correct or——

Mr. FOWLER. That's correct.

Mr. BEDELL. If that's the purpose of the charge, then the thing I don't understand is why you can't address it by addressing bypass itself rather than saying you're going to have an extra charge on our small business people in order to do it.

Mr. FOWLER. Because all of this is interrelated and if you load toll rates that drives people, typically large users, off the system. That creates an incentive to bypass. It's very directly related. That is, the imposition of customer line charges and deloading toll rates is very integrally related to the problem of solving bypass.

Now by going more to cost based rates for long distance usage, that does not mean that all bypass will be stopped. There will still be some bypass for, for example, superior technological reasons, but we think it will dramatically encourage a lot of large users to continue to use the public network and thereby let all the people have the advantage of the revenues that are generated from that use.

Mr. BEDELL. We are trying to understand, out what I simply cannot understand and I would think that the public could not possibly understand, is why it is that if your real purpose is to discourage bypass, which you told us it was, why you can't do it by a charge against bypass. I'm not saying what it ought to be—rather than a charge against small business people—but I don't know we need to debate that longer. Our time is limited.

If my small business people running a little store in Superior, IA cannot afford this rate increase, you indicated they wouldn't have to pay the increase. How do they go about doing that?

Mr. FOWLER. They would have to go to the Iowa Public Service Commission and seek a waiver of those charges.

The other point I wanted to make is that if we don't do something here, that local small business which has to have a telephone as you observed is going to be paying a lot more than what we're talking about here over the long term.

Mr. BEDELL. Well, most of my people are kind of worried about surviving over the short term, if I might say so, Mr. Fowler, and that's the biggest trouble I have with your testimony.

I don't think you understand the economic situation that exists in rural America but that's beside the point. That's why I get so frustrated. I think maybe I owe you an apology, but I think you would get as upset as I am if you were out there with those people and realized the contrast between what I'm hearing here from you and what I hear when I'm out there with them.

It's as if we're in two different worlds, Mr. Fowler. It's as if somebody is sitting here in Washington in a ivory tower that doesn't know what's going on out in my area.

You say some people are going to be worse off. Let me tell you they sure are going to be worse off and it's terribly frustrating for some of us to sit on these types of committees because we get——

It should be obvious I'm disturbed over what I see and I think it's just a crime, frankly, what we're doing to the common people out there, and all we can do is sit here and scream at you and then the executive branch of the Government goes right on out there—I don't care if they're Republican or Democrat—they go right on doing as they please. Then they get AT&T to run a survey for them and then they do what the survey says ought to be done. Well, my poor people out there in Iowa who can't afford an airline ticket to come to a funeral here in Washington, or can't afford to make long-distance rates, or maybe can't even afford to keep their telephone out there, feel that nobody is hearing them and nobody cares about them.

I think they've got a legitimate concern and the lack of compassion just tears some of us apart as we sit on these committees. I apologize to you if I got upset but it's awfully difficult not to get upset when you hear these sorts of things, Mr. Fowler.

Mr. **Fowler.** Mr. Bedell, I understand your frustration and your concern, sir, and, no, you do not owe me an apology. I know you feel very strongly the way you feel. It's a very difficult question and there are no easy answers and that's part of the problem and I think we all recognize that.

I have somewhat simplified this today. There are lots of these things that none except for the most seasoned expert on our staff who has been studying this stuff for 20 years understands. It's very complex.

But the basic issues are there and they've got to be addressed and we think that the course we've embarked upon, which is thoughtful in providing for waivers for truly needy people, which provide assistance for high cost telephone companies typically in rural areas, is a very thoughtful and carefully crafted document that is sensitive to the kinds of concerns that you've been talking about.

Mr. **Bedell.** Why was it that you didn't provide those waivers at the Federal level instead of saying it's going to have to be up to the state to decide?

Mr. **Fowler.** Well, we initially said that and the decision which we've issued which is outstanding for comment and for resolution by the end of this year, we are considering whether the imposition of a Federal program would be desirable.

Mr. **Bedell.** You said that if it could be shown that your actions benefit big business at the expense of small business that you would consider changing those.

I assume that means that if we could get a study that clearly showed that the lowering of long distance rates and the increase of local rates was much more of a problem to small business than to big business that you would consider then changing your actions.

Mr. FOWLER. We certainly would be sensitive to any comments.

Mr. BEDELL. You would consider changing them if that were the case?

Mr. FOWLER. We would consider it, yes, sir.

Mr. BEDELL. Thank you.

Mr. FOWLER. I think you would have to show, if I may say so, a significant drop in the ability to actually afford service at all. That's what we're concerned about here. The question is not——

Mr. BEDELL. That wasn't my question.

Mr. FOWLER. People don't like to pay more for things and we understand that. None of us do. I don't like to.

Mr. BEDELL. I think in fairness that was not my question. My question was, if these actions give greater advantage to big business than they do small business—and I thought your answer was, yes—you would consider changing them if that were the case.

Is that still your answer?

Mr. FOWLER. What I'm saying here, sir, is no, I do not think there are advantages to one over the other.

Mr. BEDELL. That's not our question. If there was, would you consider changing it?

Mr. FOWLER. Well, if you say that somebody enjoys a greater economic advantage than another, I can't quantify that. For example——

Mr. BEDELL. If we can, would you consider changing it?

Mr. FOWLER. I would consider anything that is filed, sir, but what I'm trying to say here is it would be hard to quantify——

If Sears, Roebuck, your example, is able to reduce its long distance rate significantly and we're able to keep local telephone bills for your hardware store in your district from having a $20 per month charge, let's say, tacked upon it as a result of massive bypass, I don't know which is the greater one and how you weigh those and which is more important.

I think we can do basically both through the FCC plan. I'm not trying to evade your question but the short answer is certainly we will consider anything that's filed.

Mr. WYDEN. Mr. Chairman, I'm going to wrap it up at this point. You have been exceptionally generous with your time this morning, literally 2 hours, and I think you know that the members feel very strongly about this. I've been with you in a number of hearings now and no one questions your sincerity.

I think my concern has been that you are essentially advocating supply side telephone service, that the theory is let's give the break to the people at the top because they are so important in the economic system and unless they get the benefits we won't be able to create a revenue base so that something will trickle down to everybody. I think you've also heard today that the members essentially don't agree with that.

I just speak for myself and my concern is that with the kind of supply side phone service approach you're talking about what we'll have is a two-class communications system in this country. We would have what I called last year an information aristocracy, where those who are well-to-do would essentially enjoy the fruits of the communications revolution—in my district they call them the wiz bang gadgets—and the small businesses and the senior citizens and others might not be able to afford it.

The one thing I would want to ask and I think maybe this is a good project for us to quit on and one we could undertake together. Between now and the time the task force wraps up its work in November, I would like to see the FCC do an independent analysis, with its own staff, not a Perl study or a Bell study, but the staff of the FCC, which we spend a great amount of money for in terms of the authorization process, do an independent study of the effects of telephone rate hikes on small businesses, all of them, factor in the access charges and local costs and the trend towards mandatory measured service.

I would be happy, Mr. Chairman, to work on devising that study with you because I think we need to have that kind of information for the members, given the concerns expressed today.

Is that something you could commit the agency to doing between now and November, and independent agency done analysis of these various phone rate hikes on small business?

Mr. FOWLER. Mr. Wyden, first I'd like to say that I will have to talk to the other commissioners on this and we have done one study, the Michigan study, which in large measure does look at the questions you're talking about but you're talking about very specific points there and I would be happy to discuss that with you further.

The main problem, I guess, would be funding and the time deadlines that might be involved, but I would certainly like to explore that with you and if we can do it, we will do it.

Mr. WYDEN. I may have missed the part in the Michigan study that deals with phone rate hikes on small business.

Mr. FOWLER. It talks overall about what the effects would be on all telephone subscribers.

Mr. WYDEN. I think that goes to the guts of the question and what Berke Bedell and some others have been talking about.

We want to look specifically at small business and you have come with your, as always, forceful and eloquent position from your point of view, but it reflects averages. No one disputes the averages and the average cost, but the fact is there are a lot of small businesses that are getting crunched in this country when you just use averages.

What we want to do with this study, and I want to commit my time to work with you personally, is to look independently, in an agency run study, at phone rate hikes on small business.

If you can go to the Commissioners and let them know how strongly the members here feel, and if you can convince them that that ought to be done, I think that would be a real public service, and we have from now until November and I'll commit to you personally as much time as you need to help devise this effort.

Mr. FOWLER. All right, Mr. Wyden, I appreciate that, sir, and I'll be glad to work with you on that.

Mr. WYDEN. Thank you very much, and again we thank you for giving so generously of your time this morning.

Mr. FOWLER. Thank you, sir, and members of the task force.

Mr. WYDEN. Our next panel will be Commissioner Patricia M. Worthy, District of Columbia Public Service Commission, on behalf of the National Association of Regulatory Utility Commissioners, and Mr. Ozle L. Allen, manager, Ben Lomand Rural Telephone Cooperative, Inc., McMinnville, TN, on behalf of the National Telephone Cooperative Association.

If you two would please come forward?

Commissioner Worthy, why don't you begin. We will make a copy of your prepared testimony part of the record, and if you would like to just highlight some of the points that are most important to you, I think that might speed it along.

I think some of the members are concerned we're going to still be here at breakfast time tomorrow trying to make our way through this. If you could just highlight your views, that would be helpful.

TESTIMONY OF PATRICIA M. WORTHY, COMMISSIONER, DISTRICT OF COLUMBIA PUBLIC SERVICE COMMISSION, ON BEHALF OF THE NATIONAL ASSOCIATION OF REGULATORY UTILITY COMMISSIONERS, ACCOMPANIED BY JILL ROWE, ASSISTANT DIRECTOR OF CONGRESSIONAL RELATIONS, NARUC

Ms. WORTHY. Thank you, Mr. Wyden.

Good morning, Mr. Chairman and members of the task force. My name is Patricia Worthy and I'm a Commissioner with the District of Columbia Public Service Commission. I am testifying today on behalf of the National Association of Regulatory Utility Commissioners, commonly known as NARUC.

Accompanying me today is Ms. Jill Rowe, who is NARUC's assistant director of congressional relations.

The members of NARUC appreciate your invitation to express our views on the negative impacts on residential ratepayers and small businesses caused by the FCC's access charges, but also more importantly, a point that I don't think has been made this morning is also a result of the FCC's decision with regard to depreciation and expensing inside wire.

As a result of that, regulators will be faced with regulating local telephone companies faced with substantial increases in expenses in the upcoming years.

We believe that the FCC's decision to establish a flat rate end user charge to compensate local telephone companies for the use of their facilities to provide interstate communications creates what is in effect a local service charge for telephone subscribers.

In addition, such a charge is violative of the FCC's statutory authority under the Communications Act of 1934, which denies the FCC jurisdiction to impose charges on the intrastate network.

The negative impact caused by assessing costs in this way is that intrastate rates will rise and end users will be forced to pay the charge regardless of whether they utilize the interstate system if they wish to continue receiving intrastate service.

The end result is that many residential and small business users who are unable to pay the higher rates will be forced to give up their telephone service. As more subscribers are forced to drop off the network, the share of fixed costs will increase that the remaining subscribers will bear.

It was interesting this morning, though Chairman Fowler agreed that perhaps there was some discrepancy about the percentage, he did at least admit that there was going to be perhaps a 1-percent dropoff from the network as a result of the Perl study. My comment to that is 1 percent is a substantial number of individuals who will no longer be able to use telephones.

On May 8, 1984, NARUC's committee on communications adopted what we have called the St. Louis Resolution, which proposes an alternative plan to end user charges that is proposed by the FCC.

This resolution is attached to my testimony as appendix 2. Basically the resolution proposes that State commissions shall recover under a single set of access charge tariffs interstate costs allocated by the FCC Federal-State joint board for all interexchange use of local plants within each State.

The NARUC will continue its commitment to ensuring universal telephone service to local ratepayers at affordable rates. We urge the FCC, the States and the Congress to continue to search for an alternative to the grossly unfair end user access charge plan.

We believe that NARUC's St. Louis resolution is such an alternative.

Thank you.

[Ms. Worthy's prepared statement with attachments follows:]

PREPARED STATEMENT OF PATRICIA M. WORTHY, COMMISSIONER, DISTRICT OF COLUMBIA PUBLIC SERVICE COMMISSION, ON BEHALF OF THE NATIONAL ASSOCIATION OF REGULATORY UTILITY COMMISSIONERS

My name is Patricia Worthy. I am a Commissioner with the District of Columbia Public Service Commission, and I am testifying today on behalf of the National Association of Regulatory Utility Commissioners, commonly referred to as the NARUC. Accompanying me today is Jill Rowe, NARUC Assistant Director of Congressional Relations.

The NARUC is a quasi-governmental, nonprofit organization founded in 1889. Within our membership are the governmental agencies of the fifty States, the District of Columbia, Puerto Rico and the Virgin Islands which are engaged in the regulation of utilities and carriers. Our chief objective is to serve the consumer interest by seeking to improve the quality and effectiveness of government regulation in America.

The members of the NARUC appreciate your invitation to express our views on the negative impacts on residential ratepayers and small businesses caused by the Federal Communications Commission's (FCC's) access charge and depreciation schedules decisions and to address some of the potential problems that regulators will face, from the perspective of protecting the ratepayer, as regulated local telephone companies enter into non-regulated areas of business. As the national representative of the State regulatory commissions, the NARUC has taken an active interest in the FCC's actions concerning the telecommunications industry and telephone utility diversification in the wake of divestiture.

Our particular objective is to assure that the telecommunications network which has evolved since the Communications Act of 1934 is available to all citizens at affordable rates, hence the phrase heard so often--preserving universal telephone service. In light of this goal, the NARUC is deeply concerned that this fundamental policy is in jeopardy due in large part to various Federal regulatory decisions, including the imposition of flat end user access charges by the FCC, and the FCC's preemption of State regulation of depreciation procedures, as well as the divestiture of AT&T's Bell Operating Companies. The probable effect of these three changes will be to increase substantially the rates which local subscribers must pay for basic telephone service. Today, I will primarily address the two FCC decisions.

The NARUC has actively opposed the FCC's decision to establish an end user access charge plan to compensate local telephone companies for the use of their facilities to provide interstate communications (FCC Docket No. CC 78-72). The Association appealed the FCC's February 28, 1983 decision (NARUC v. FCC, Docket No. 83-1225) and we fought hard to see Congress pass legislation that would have reversed or delayed the FCC's access charge decision and thereby help preserve universal telephone service. Unfortunately, we did not succeed on our appeal and Communications Act reform legislation in both houses of Congress died when the Senate defeated S. 1660, a bill proposing Universal Telephone Service Preservation Legislation.

Despite our setbacks, we continue our attempt to educate Congress, the FCC, and the courts on the rate increases that will be caused by the implementation of access charges. The flat-rate end user access charge that is to be imposed on residential and single line business customers starting in June 1985, and which is already being imposed on other small businesses, creates what is in effect a local service charge for telephone subscribers (since it is not tied to the use of the interstate network and is a precondition to obtaining local service). Such a charge is violative of the FCC's statutory authority under the Communications Act of 1934, which denies the FCC jurisdiction to impose charges on the intrastate network.

In the past, a substantial portion of exchange carriers' fixed plant (non-traffic sensitive or NTS) costs of local telephone companies were recovered in the rates of long distance carriers, in recognition of those carriers' use of local telephone facilities to complete long distance calls. Under the FCC plan, those costs will be recovered directly from local telephone customers by assessing a monthly flat-rate charge on all end users (residential and commercial subscribers), regardless of whether they utilize the interstate system. Assessing costs in this way will result in an increase in intrastate rates, despite the FCC's arguments to the contrary, since end users will be forced to pay this charge if they wish to continue receiving intrastate service. If a subscriber fails to pay the charge, the FCC has directed local companies to terminate intrastate service. When residential and small business users are forced to give up their telephone service, the longstanding goal of State regulatory commissions to see that universal telephone service is provided at affordable rates is seriously impeded. In addition, as the number of telephone subscribers which are forced to drop off the network increases, the share of fixed costs is increased. The result is a further increase in rates because a smaller number of subscribers must bear the fixed costs.

In an attempt to make the FCC further explore the problem of potentially large rate increases due its access charge decision, the State of Michigan and the Michigan Public Service Commission in February 1983 filed a petition with the FCC, requesting the FCC to institute an inquiry to study the aggregate impact of rate increases on the affordability of local telephone service, and to consider appropriate remedies to maintain universal service. Consistent with this petition, the NARUC Executive Committee, the Association's policy-making body, adopted a resolution on March 10, 1983 identifying three issues requiring FCC study.[1]

On December 21, 1983 the FCC issued its study in response to the Michigan petition (Docket No. 83-788). The study concluded that there is no threat to universal telephone service. The NARUC found the study flawed in its method for calculating local rates and a significant understatement of the effect on local rates of FCC decisions. The FCC's own figures in the study showed an increase of approximately 42% in local residential service rates for 1984 alone and an 82% increase within 5 years. Needless to say, the study did little to quiet concerns about drastic local rate increases and threats to universal telephone service.

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[1] See Appendix 1.

In the FCC's new Notice of Proposed Rulemaking concerning the access charge plan, the FCC stated that it does not intend to preclude the Federal-State Joint Board (made up of Federal and State commissioners) [49 U.S.C., Sec. 410] from considering possible variants to end user charges that will significantly decrease toll loading and achieve the Commission's basic goals. This statement provides the Board authority to develop possible alternatives to the FCC's flat rate and user charges. The Joint Board must complete its access charge inquiries by November 15, 1984.

Consistent with this continuing exploration of the effects of the FCC's decision on access charges, on May 8, 1984, the NARUC Committee on Communications adopted what is called the St. Louis Resolution during a special meeting of the Committee held in St. Louis, Missouri.[2] The resolution essentially reaffirms the NARUC's commitment that the Joint Board is the appropriate mechanism for determining the interstate allocation of toll costs and adopts an alternative plan to end user access charges. The NARUC hopes that the FCC will give serious consideration to the St. Louis Resolution.

Another issue of great concern to State regulators, and one that goes hand-in-hand with the problems that regulators have with the access charge decision, is the FCC's January 1983 decision to fix telephone company depreciation schedules (CC Docket No. 79-105) for intrastate ratemaking purposes. These schedules are a key factor in determining local rates. The NARUC asserts that authority for the setting of depreciation rates and accounting methods for local telephone companies providing intrastate service is reserved to the States under the Communications Act of 1934. The NARUC appealed this FCC decision in February 1983 [sub nom. Virginia State Corporation Commission v. FCC, Docket No. 83-1136 (4th Cir.)]. Unfortunately, on June 18, 1984 the U.S. Court of Appeals for the 4th Circuit affirmed the FCC's decision by a 2-1 margin.

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[2] See Appendix 2.

The FCC's decision to preempt State authority over depreciation methodologies for intrastate ratemaking purposes exerts yet more upward pressure on local telephone rates. The FCC order gives the FCC the authority to force States to adopt FCC-approved accelerated depreciation methodologies for exchange and intrastate toll plant. The decision also requires exchange carriers to change their accounting treatment to expense rather than capitalize the costs related to station connections. The cumulative effect of this decision will be higher monthly telephone bills for ratepayers as the ratepayer bears the additional costs from the change in accounting methods as well as the increase in rates due to accelerated depreciation methods. The prescription of accounting practices and depreciation rules is an integral part of intrastate ratemaking and is an essential tool to enable State regulators to maintain universally available and affordable telephone service.

Finally, I would like to spend a moment today addressing the problem that State regulatory commissions face as regulated local telephone companies enter into unregulated businesses in the wake of divestiture. This is the problem of preventing cross subsidization. State regulators must ensure that the costs and revenues of regulated and non-regulated business are kept separate so that the local exchange ratepayers are not forced to bear the costs of the unregulated business and that monopoly local exchange company revenues are not siphoned off to support the unregulated venture.

It is hard to predict at this time how big a problem diversification will prove to be in that only since divestiture have local telephone companies been allowed by law to pursue opportunities in unregulated areas. However, it is a potential problem that must be monitored closely as telephone utility diversification grows in leaps and bounds.

While opinions in the regulatory sector vary on whether such diversification is to be encouraged or discouraged, there is agreement that ratepayers must be protected from cross-subsidization where local telephone companies have already ventured out into the deregulated arena. Essentially State regulators seek to prevent a utility from supporting its non-regulated business with ratepayer funds and to prohibit transactions between regulated and non-regulated entities of the business at non-cost-based or market-based transfer prices.

How can the States best prevent ratepayer subsidies of unregulated business ventures? The immediate response given to the State regulatory commissions is to have the local operating companies conduct their unregulated venture under a separate subsidiary and thus the monitoring problem is supposedly made easy. However, although the regulator's supervisory task is made easier by unregulated business being carried out by a separate corporate entity the problems of regulation extend beyond whether or not there is a structural separation.

The best solution appears to be constant and careful monitoring by the State commission of the utility's books and records to ensure that a regulatory barrier actually exists between the utility's regulated and non-regulated businesses (i.e., that expenses are actually being booked under the deregulated subsidiary and not the regulated operating companies). Of course, this monitoring task is made difficult if regulators are not afforded access to all relevant materials at the time when they are needed. In addition, another essential regulatory tool in guarding against a ratepayer subsidizing an unregulated business is the establishment of appropriate accounting methodologies.

Most recently in trying to address issues such as the cross-subsidization problem, the NARUC Committee on Communications, at its 1984 Winter Meeting held in Washington, D.C. on February 28 and 29, created a Subcommittee to direct the development and completion of a review of Bell Communications Research, Inc. (BCR) and the Bell Regional Holding Companies.

Conclusion

The NARUC will continue its commitment to ensuring universal telephone service to local ratepayers at affordable rates. However, the FCC's decisions on access charges and depreciation schedules, as well as the potential problems presented to regulators since divestiture as local telephone companies become involved in unregulated businesses, contribute to making the regulator's task an increasingly difficult one. It is therefore imperative that the FCC, the States, and Congress carefully monitor and study the effects that all of these changes are having on local rates. Most importantly we urge a continuing search for alternatives to what we feel is a grossly unfair end-user access charge plan and we strongly recommend that serious consideration be given to the NARUC's Committee on Communications' St. Louis Resolution.

Thank you for your time and attention.

Appendix 1

RESOLVED, that the NARUC petition the FCC to conduct an inquiry or rulemaking, with fullest possible NARUC participation, which will consider:

1. The probable increase in basic telephone service rates in the 1984 time frame produced by the AT&T consent decree and by recent FCC decisions; and
2. The percentage of customers likely to discontinue basic telephone service; and
3. Solutions which will preserve universal telephone service.

Sponsored by the NARUC Committee on Communications

Appendix 2

The St. Louis Resolution
(Communication Allocations and Access Charges)

RESOLVED, That the Committee on Communications of the National Association of Regulatory Utility Commissioners (NARUC) reaffirms its commitment that the Federal-State Joint Board is the appropriate mechanism to determine the interstate allocation of toll costs; and adopts the following position:

1. State commissions shall recover, under a single set of access charge tariffs, interstate costs allocated by the Joint Board for all interexchange use of local plant within each State;

2. Interstate access charge rate levels shall be set and tariffs administered by the State commissions in compliance with Federal guidelines recommended by the Joint Board and approved by the Federal Communications Commission;

3. The suggested Federal guidelines are:

   a. A cap on non-traffic sensitive (NTS) costs which may be levied on interstate interexchange services for access to the local exchange;

   b. Charges shall not discriminate against interstate, interexchange service;

   c. Charges shall not discriminate between different interexchange carriers utilizing the same services or facilities;

   d. Charges shall not encourage uneconomic bypass; and

   e. Charges shall promote universal service;

4. An aggrieved party may petition the Joint Board for review of a State commission action for failure to follow the above guidelines.

Adopted May 8, 1984

Mr. WYDEN. Next we will hear from Mr. Allen, manager of Ben Lomand Rural Telephone Cooperative.

Mr. COOPER. Mr. Chairman, if I could just intervene here for a second to say how proud we are to have Mr. Allen here today. He is an outstanding leader in the cause for reasonable telephone rates for all small businesses and rural people nationwide and I personally don't think that the National Telephone Cooperative Association could have chosen a finer witness and I'm just very pleased to have him with us today.

Thank you.

TESTIMONY OF OZLE L. ALLEN, MANAGER, BEN LOMAND RURAL TELEPHONE COOPERATIVE, INC., ON BEHALF OF THE NATIONAL TELEPHONE COOPERATIVE ASSOCIATION

Mr. ALLEN. Mr. Chairman and members of the committee, I'm Ozle Allen, manager of the Ben Lomand Telephone Cooperative in McMinnville, TN.

I'd like to say possibly that I feel like David and Goliath up here today, the Biblical story, but I will take David's side.

I'm here to represent NTCA and the rural interests of small businesses in our country, not only in the rural part but also in the urban part of our country that I think hasn't been addressed too well.

I believe it would be advantageous for us, for me to review with you just the size and the location of our co-op and the job that we're trying to do.

We're located in middle Tennessee and covering basically 3,200 square miles of territory. We have 2,600 miles of line and 19,000 customers.

Our customers derive a living from farming, coal mining and light industry, and when you calculate this out our density is only seven subscribers to the mile. I'd like for you to remember that. Our cost per subscriber is near $1,900 per subscriber, or local loop that you've been hearing referred to here this morning.

Our average income per family for our customers, and this information was compiled by Farmers Home Administration and the Chamber of Commerce, per family is $12,800. That is the type people that we're serving in middle Tennessee.

We have 17 exchanges to serve these 19,000 people and they range in sizes from 800 to 3,500 in numbers per exchange. We have digital switching in three of our larger exchanges, or tandem switches, and the remainder 14 are step switches or electromechanical switches.

Now there are, there are three figures before I move on into the other part of my testimony that I would like for you to remember, and that is our density, our cost per loop and also another figure that I haven't quoted, we still have 3,000 unserved households in our franchised area.

The service is available. The lines are there. Their income level is such that they can't afford telephone service at the present rate. I would like to emphasize that.

Now since the divestiture and the FCC rulings and what have you, our co-op has made two or three different studies that I think would be of real interest to you.

We ran for 2 months and made a study of our toll pattern and both months were almost identical. We had 15 percent of our subscribers—this is residents and business—that made no long-distance calls, period. That's intralata, interlata, interstate or whatever. We had 42 percent of our subscribers that made only $5 or less toll calls and that is interlata, interstate, what have you and that's total $5 or less, and those 2 months' studies were almost identical.

Now I couldn't answer and tell you that they were the same people, but the percentages were practically the same.

With those facts in mind, I would like to move on into an area that was effective May 25, 1984, and that's what I'm here to testify about, small businesses and multiline access charges.

On May 25 that was implemented and it so happened that we're on billing cycles and May 25 was the first cycle that we billed, so we implemented the $6-access charge for business lines, multiline customers, and so each customer now has been billed for one month with these access charges, and what I'm fixing to quote to you isn't assumptions, isn't theory, isn't guesswork or crystal ball gazing. These are facts.

We've taken 22 customers picked at random. I was even in Nashville when my accountant picked them and I told him to pick them at random, pick some of the large customers and pick some of the small customers, and they range from two lines to 16 lines, access lines, or formerly we used to refer to them as trunks before this era that's caught up with us.

We taken the total amount of toll that each customer used this month since the multiline access charges are in effect, and we had only three customers out of the 22 that lowered his telephone bill by using the 6.1 percent reduction in toll on interstate.

Now let's keep that in mind. We are only lowering the rate on interstate calls, and the pattern that our study reflects is that the majority of our people and the majority of the money is going for intralata and intrastate calls or is within your calling area, within your service area, where you call to get tractor parts or where you call to see a doctor who's a specialist and that type of thing.

Let me move on here. The first customer that we studied had a total calls of $140.27 and he had three trunks. Of this $140.27, $128.65 was intralata, $11.62 were interstate calls.

So by simple calculation he saved 71 cents. He was charged $6 per trunk times three trunks is $18, so by simple calculation you can see what he reaped from this. He reaped a rate increase.

Now we move on down to another one that's fairly sizeable. Here's one with $106 total toll calls. He had $104 of it was intralata, $2.59 of it was interstate calls, and he received a 16-cents reduction in toll. He had five trunks. He was charged $30 per month for that increase, so 16 cents from $30, you see how much it cost him, $29.84, to have multiline access charges implemented upon him.

I won't go over each one of them. It's in your packet and it's presented to you.

I would like to take the total of the 22 customers and what they saved by the 6.1-percent reduction was $318.65. There were 125 trunks or access lines studied. That made an average of five-plus trunks per customer, and their charges were $750 to have access charges implemented on them, and the difference between their savings and their charges was $431.35 cost. By simply dividing 125 trunks into that you can see that it cost them $3.45 per month per line net to have access.

Now that's small businesses in my area and they range from two trunks to 16 trunks. We are much concerned for their interests. Their interests are our interests. Their industry is our livelihood.

We're a small business besides being the furnisher of telephone service, and we're concerned. We hear a lot about bypass and we fear bypass but the bypass that we fear is losing the subscriber and that is bypass, and if we price him out of his range we will lose the bypass, the toll and we'll lose the local ratepaying customer and when we lose the local ratepaying customer then that undermines our ability to survive as business and it undermines our ability to pay back our REA loans that we have committed to already and there are plants designed to pay back, and based upon present toll settlements that we have at this time, and I'm sure that others are concerned about that also, that when you undermine our business then it starts snowballing and other people get in trouble, also.

Now in summation I would like to say that I've talked a lot about the savings and the cost of the ones that make toll calls. Let's don't forget that 15 percent that I quoted that made no toll calls and they get access for the $6 per trunk at the same time.

Now somebody might say maybe he's got too many trunks out there. Who am I to say he's got too many trunks out there? Maybe he needs his trunks for local business, within his free service calling area or extended area service as call it, EAS, he needs that trunk for people to call him and buy fertilizer, to buy chemicals for spray and what have you. Who am I to say he's got too many trunks out there and maybe he should cut back on the trunks? I think he has his own analysis and own study there to depend on where he needs the trunks or where he doesn't.

I'd like to say in conclusion that I really think this is a privilege for me to be able to come and testify before you, and I hope in some little way that I've contributed some facts that you might use in your study and that you will keep in mind rural America as you gentlemen have talked about, that I know about and that I'm afraid some of the others don't now firsthand what we rural Americans are up against and we small businesses.

Thank you.

Mr. STENHOLM. Thank you, Mr. Allen.

Mr. Cooper?

Mr. COOPER. Thank you, Mr. Chairman, and thank you, Mr. Allen, for that outstanding testimony, especially for the facts that you've presented before the committee. Since the access charge went into effect, there has been very limited data available, and you provided some of the first that I know of anywhere in the Nation and it's very helpful to us.

Could you tell me what the percentage of telephone service is, in relation to your total franchise area?

Mr. ALLEN. Rephrase that, if you will.

Mr. COOPER. You said that you had about 3,000 customers who couldn't even afford telephone service right now.

Mr. ALLEN. We have about 15 percent of our homes that don't have telephone service right now.

Mr. COOPER. So that's about 15 percent of your total four-county area?

Mr. ALLEN. And may I say that we do have area coverage and services available to them. Now we're required by REA to give area coverage, which I fully agree with. If we have to go three miles or four miles for one customer, we go. We don't charge him any extra cost because we're committed to serve that customer. If it's a permanent resident or a permanent business, we serve him.

Mr. COOPER. And, as you pointed out in your testimony, you have only an average of seven customers per mile. That means it's a great burden on you to provide that local service.

You mentioned, and I thought it was an excellent point, that there is another type of bypass rather than the fancy type of bypass, namely the poor customer who can't afford a phone right now and losing him is another form of bypass.

Overall, what do you think the implications are for your telephone cooperative, the Ben Lomand Cooperative?

Do you think that this rate increase will encourage a great deal of both the fancy bypass and the simpler type of bypass in your area?

Mr. ALLEN. In my area, I think that it will increase the down-to-earth type of bypass. We haven't got customers large enough and I don't think it would be feasible for them to bypass with their own microwave network or satellite network or whatever, but if we price our customers out of their paying range then that's the type of bypass that we would experience.

Mr. COOPER. Overall what do you think this new access charge will do to your business? You mentioned, quite rightly, that the Ben Lomand Cooperative is a small business. You mentioned something about repaying the REA loans. What sort of financial condition do you think you'll be in?

Mr. ALLEN. If this continues and the local rates do skyrocket a hundred percent as we heard quoted here this morning, definitely I'm going to lose customers.

I'm concerned, my board is concerned, and I feel like REA is concerned because there are no magics and there are no Santa Clauses out there. If they take away our paying customers then we're in trouble for our commitments.

Mr. COOPER. Chairman Fowler mentioned that States were authorized to make plans to provide for low-income customers. Are you aware of any plan in Tennessee that would help low-income people meet these increased charges?

Mr. ALLEN. No, I'm not and that bothered me, that statement did. If the Federal Government is going to implement it and then ask the States to come back to bail them out, that bothers me some.

Mr. COOPER. I think that's called New Federalism. We see a lot of that.

Mr. ALLEN. Now we have a plan that we think helps our low-paying customers and maybe some of our groups that are not as fortunate as others.

We have left in our tariff four-party service. One party is available to every person out there and we have a system that's 98.6 or something near that of one party, but four-party rates are still left in our tariff. They were left in there for one purpose only—not that we want to downgrade telephone service but if the person says I just can't pay those high rates then he does have a four-party rate and he can have service with that.

Mr. COOPER. That's the old partyline system.

Mr. ALLEN. Four parties. The one party is available to everyone if he wants it.

Mr. COOPER. The statistics you presented to us saying that overall the average small business in your district, based on your study of 22 customers, faces a $3.45 per line rate increase as a result of the $6 access charge.

To me, that's the first hard evidence I've seen concerning the actual rate of access charge, on actual dollar figure chosen.

As I understand it, the FCC cites various things—elasticity studies by Mr. Perl and others—and they just seem to use those broad economic studies to more or less pick the $6 figure out of the air.

It seems that a logical conclusion of your study is that a $2.55 access charge would have been the break-even point, where the average business in your service area would have come out with no net gain or net loss.

Do you think that's a fair conclusion?

Mr. ALLEN. That would be on the 22 that we made the study on, yes.

Mr. COOPER. The impact that $2.55 access charge would have on your business as a telephone cooperative, do you think that would jeopardize any REA loan repayments?

Mr. ALLEN. It's not the $2.55 that I fear so much. I think we just got the foot inside the door when we implemented this and it's going to be a continual process and this is just the starting point.

Mr. COOPER. I appreciate the gentleman's testimony. Thank you, Mr. Chairman.

Mr. STENHOLM. Mr. Bilirakis.

Mr. BILIRAKIS. Thank you, Mr. Chairman. I apologize for my tardiness and particularly since I walked in during the latter stage of Mr. Allen's testimony. What I heard I thought was awfully good, certainly from the grass roots and that's what we need.

Mr. Allen, should rural small businesses be exempt from the end user access charge?

Mr. ALLEN. I think access charges should be exempt from everyone. I think the carriers of toll should have to pay this in some form. They're the ones that are reaping the benefit out of it, and I think the access charges should be placed on the carriers of toll. That's residence, small business, one party and what have you.

Mr. BILIRAKIS. So your answer is yes across the board.

Mr. ALLEN. That's right.

Mr. BILIRAKIS. Do you feel that if the access charge were carried forward, $2.55, $6.00, or whatever that many customers would actually give up that portion of telephone service or give up telephone service altogether?

Mr. ALLEN. Yes, sir, I feel that we'll lose a percentage of our business clients.

Mr. BILIRAKIS. Is that limited basically to your area, the area that your cooperative serves, or might that answer apply across the country?

Mr. ALLEN. I can answer for my area, but I feel like my area is a good cross section of the country. To answer directly, I would just have to answer for my own.

Mr. BILIRAKIS. Now as far as small businesses are concerned, rural small businesses particularly, what would you find? Would you find that small businesses that now might have three or four telephone lines would reduce those lines to possibly one or two and thus basically hurt the efficiency of their own operation and ultimately hurt the consumer, the customer?

Mr. ALLEN. Yes, sir, I do, and may I analogize just a moment?

We serve a large number of nurseries. In the McMinnville area. It is the nursery center of the South, and we have what we call the mamma and daddy operation. They have a small nursery shed out here and their home, they have two lines in it.

For the shipping season and the buying season, which is in the fall till the leaves put out in the spring, they need those two lines, but we haven't lost basically any of the second lines nonseason operations.

I feel that they are going to look at that very long and hard and examine on the offseason and things like that they will be reducing the lines because the rate structure, even with the $6 accessed on them they are getting from 20 to 24 percent increase on their local side right now with $6.

Now to clarify that, I will say this, that people having—we're not talking about one line but I have to say this to lead into the other.

A person that has one line on a business, our business rate is $20 a month. If his lines are terminated in a key system, that is key phones where you've got intercom and can answer either line, it's $25 a month. If his lines are terminated in a PBX, small or large, it's $30 a month. All right, $30 per month per trunk, six times 30, you see what the percentage is and it's roughly 20 percent increase right there, and likewise then at $25 a month rate and $6, you get the relation there. I think that would be roughly 24 percent increase in rate, if I calculated correctly.

Mr. BILIRAKIS. I'm not for one moment acknowledging that there must be an access fee of any sort, in fact I voted against it when it came up on the floor, but I think we've got to consider in all of our deliberations that there is a strong possibility and maybe even a probability that there may be some sort of an access fee.

But should there be a decision that there must be an access fee in the form that was defeated in the House, whether it be, the $6 figure or your $2.55 figure or whatever, I would ask you then at what level of line usage, particularly as it involves small business, would an access fee be fair?

Now you've already said you don't think there should be any access fee, period, but I mean assuming now that there maybe would have to be. Is the $2.55 figure a figure that you would consider fair?

Mr. ALLEN. That would be fair with this study of only 22 of my customers, that's all I could answer for, and they weren't handpicked. They were just picked at random.

Mr. BILIRAKIS. If the $2.55 figure were used—let's say that there were the need for an access fee and if that access fee were a uniform one across the board, all around the country, the $6 charge, for instance, or your $2.55 charge were used, or if that access fee were broken up by areas so that maybe $2.55 would be applicable in your area and something else elsewhere, that may not work, I don't know. That's what I guess this committee is all about.

Is that a figure you feel everybody would break even on? In other words, the telephone companies would break even on, that $2.55 figure? Is that what you testified earlier?

Mr. ALLEN. On the study that we performed, they would.

Mr. BILIRAKIS. Do you feel that the small businessmen would reduce their lines and thus reduce their efficiency, et cetera, at a lower figure such as your $2.55 fee?

Mr. ALLEN. I'm not too fearful, as I stated awhile ago, about the $2.55, or $2.50 or $2.45, but I believe they just got their foot in the door and I believe we heard it testified this morning that the rates wouldn't only be lowered 6.1 percent, they were going to be lowered 30 to 40 percent, and if they are they're going to call on the local side again for more access charges.

Mr. BILIRAKIS. I see. So you think it would be the foot in the door—any access charge you feel would be a foot in the door for increases subsequently.

Mr. ALLEN. I think the camel has got his head under the tent. I think the camel has got his nose under the tent.

Mr. BILIRAKIS. Thank you, Mr. Allen.

Thank you, Mr. Chairman.

Mr. STENHOLM. Mr. Allen, you stated that the present rate that is denying 3,000 potential members from having telephone service was $20 or $30 for business. What is the residential rate?

Mr. ALLEN. We will furnish a residence phone with a dial instrument for $10.50 per month per customer. If they want to buy their own instrument, which is permissible, that would be $9.50.

Mr. STENHOLM. Commissioner Worthy, what is the rate in the District of Columbia?

Ms. WORTHY. The telephone service, Mr. Chairman? It varies. We have what they call the economy rate which is $2.28 in the District of Columbia which will allow an individual to have a basic black telephone rotary and an access to a line with a certain number of calls per month.

Mr. STENHOLM. What percent of the residents of the District of Columbia do not have telephones?

Ms. WORTHY. We are probably, in terms of the Nation, probably have greater percentage of telephone users in the District than any place else in the country. We have approximately 98.7 percent.

Mr. STENHOLM. A resident in Washington, DC, can receive telephone service today for $2.28.

Ms. WORTHY. That's correct. That's the economy rate. Unfortunately, Mr. Chairman, less than 10 percent of the District ratepayers take advantage of that rate and those who do take advantage of it are in income levels exceeding $30,000 a year.

Mr. STENHOLM. Interesting. What is the business rate in the District of Columbia?

Ms. WORTHY. Business rate is based on a per line charge and we have a usage charge as well. I can provide that information to the committee.

What I would like to do is respond to a question that was asked by Mr. Bilirakis, is that even if in fact the business customers come off the network as a result of the increases in the access charge, there is already the investment made by the telephone company in putting in the line and that investment will have to be depreciated and recovered and therefore there are expenses that have to be picked up by the ratepayers, so that's an expense in addition to the fact that we've lost the revenues from the line of that business customer.

That's an important fact that a lot of people do not focus on.

Mr. STENHOLM. Very good point.

Commissioner Worthy, in your judgment will imposition of interstate access charges put pressure on utility commissions to put intrastate access charges into effect?

Ms. WORTHY. We have—across the country the State commissioners have been extremely innovative and creative in resolving how to recover the cost of nontraffic sensitive intrastate plant.

Only a small percentage of the State commissions, including Washington, have mirrored the FCC access charge end user flat rate.

I have recently read 20 opinions of my colleagues across the country—New York, California, Florida, Illinois, Wisconsin, Michigan—that have refused to impose a flat rate end user charge. What they have instead done is to impose what is called the carrier common line charge, which is a charge that is placed again on the interexchange carriers and it is based on a usage sensitive rate.

Mr. STENHOLM. Mr. Allen, would you elaborate on the threat that toll rate deaveraging poses for rural users?

Mr. ALLEN. Yes, I would like to because I believe deaveraging toll based upon our investment in our local loops would certainly hurt us and hurt the rural area because the length of the local loops and the amount of investment that we have and then in their tolls to tie into our carrier, whether it's Bell or whoever it is.

I hope that answers you. I haven't got any statistical facts to prove that, but I feel sure that we would be hurt.

Mr. STENHOLM. If you could furnish for the record any additional information on that line, I think it would be very helpful.

Mr. ALLEN. Could I pursue something that I hope you all caught this morning in testimony?

They said, I believe, that in the State of Wisconsin the average access charge was $3 and something per month. Did I hear that this morning?

Why is the average access charge in the State of Wisconsin $3 and something a month and all we rural and small independent access charges are $6 a month?

I can tell you why it's that way, because our investment per loop in the rural area is much greater and nontraffic sensitive part of the loop. All right, the larger holding companies has a staff to file their own tariffs and they can prove that their costs per loop doesn't justify a $6 access charge.

So with the large holding companies in the large metropolitan areas, their access charge could be $2.75, $3.25, $4.25. In my own State I happen to know that the two large holding companies is $3.89 and maybe $4.25 and all we small independents are having to charge our customers $6 per month multiline access charge.

I didn't know whether you all caught that or not and I just wanted to throw that in.

Mr. STENHOLM. Ms. Worthy, in your judgment what would be the result if the lower rate you quoted to us would go to $10½?

Ms. WORTHY. That's difficult to respond to in that the economy rate is not used by those individuals that the service was provided for.

I would imagine if in fact the economy rate went to $10 as opposed to $2, but it was still far less than the other services provided or offered by C&P of the district, that those individuals who are presently on economy rate would be able to make an educated determination as to whether or not it was still economically more beneficial to stay with economy.

The problem with economy rate that may force customers off of that rate is because of the rotary dial telephone. They will not be able to access a great number of the inner exchange carriers for long distance telephone service.

Mr. STENHOLM. I guess maybe I ought to ask a different question. What is the standard rate, not the economy rate?

Ms. WORTHY. The average telephone bill in the District of Columbia is $13.50.

Mr. STENHOLM. That's the average?

Ms. WORTHY. That's correct, the average bill of a residential customer. That is local service.

Mr. STENHOLM. Is that a fairer comparison with the ten and a half dollars?

Mr. ALLEN. Very definitely.

Ms. WORTHY. Yes, Mr. Chairman.

Mr. STENHOLM. But you don't have an economy rate to offer?

Mr. ALLEN. No, I don't, other than offering them the four-party rate at a reduced rate.

Now for my own benefit, and I think it would be for you all's, on these economy rates do you put toll restrictions on these people where they can't make tolls?

Ms. WORTHY. Mr. Allen is asking me, the toll service in the District of Columbia, we don't have intralata service so there is only interstate tolls, so therefore there is no restriction.

Mr. ALLEN. No restriction. They pay $2 and something for the local rate but they can have a $100 toll bill?

Ms. WORTHY. That's correct.

Mr. STENHOLM. I recognize Mr. Bilirakis.

Mr. BILIRAKIS. Thank you, Mr. Chairman.

Mr. Allen, you are required to charge $6 access fee, is that right?

Mr. ALLEN. Yes, sir, according to the FCC mandate.

Mr. BILIRAKIS. Is that $6 broken down in any way by virtue of so much for material, so much for equipment, so much for overhead, so much for profit, et cetera?

Mr. ALLEN. No. We small independents and co-ops had to join in with the NECA, National Exchange Carriers Association, to file our tariffs and based upon our average of our investments per local loop compared to what they called traffic sensitive equipment which relates to toll, the nontraffic sensitive equipment which relates to the local side, then that was the figure that they came up for for all of we small independents, in your State and my State and what have you.

Mr. BILIRAKIS. I see. So even though the Tennessee figure is $4.80 there——

Mr. ALLEN. That's for the large holding companies. They are large enough to have their own staff to file their own tariffs and to prove that there are nonsensitive costs in relation to sensitive costs.

Mr. BILIRAKIS. How much of the $6 is profit for your company?

Mr. ALLEN. That we are not sure how that will be handled and how it will be put in the pool because it's been in effect 1 month and that we don't know how on paper transferring settlements just how much that will be in profit or what part. I can't answer that.

Mr. BILIRAKIS. But if the loss of customers that you experience is not very great or nowhere near as great as you anticipate it possibly being, isn't it true that your company could benefit from the $6 access fee as a result of the additional profit?

Mr. ALLEN. As I said, we haven't had a settlment since this has been in effect and that I couldn't relate to you. After we get some settlement and see what portion of the $6 stays with us and what portion goes to the pool and goes to smaller companies that has higher costs, the way it's distributed, I couldn't answer that.

Mr. BILIRAKIS. If it were the lower figure, you quoted a figure of $3.80 or something of that nature.

Mr. ALLEN. Of the 22 studied, right.

Mr. BILIRAKIS. If it were that lower figure versus the $6 figure, isn't it less likely that you would show a profit or it would be to your benefit with the lower figure versus the higher figure?

Mr. ALLEN. I'm not evading the question but I would like to say again wait until we get the settlements with this in the plan before I would be able to answer that.

Mr. BILIRAKIS. I am sure hoping that as a committee we look into it again in a few months, Mr. Chairman, when there is additional information.

Mr. ALLEN. It's just been in effect 1 month and we haven't had a settlement since it's been in effect.

Mr. BILIRAKIS. I suppose it would probably take more than 1 month, won't it, because we have to develop a sort of history to see how many customers go off line, how many businesses, for instance, will decrease the number of lines and that sort of thing.

Mr. ALLEN. And, Mr. Chairman, I refer back to a question. Inside your packet is a study that was made in Missouri at another co-op in Princeton—she just handed me a note—that reflects how deaveraging the toll would have an impact on his co-op, so you already have that in that packet.

Mr. STENHOLM. Mr. Weber.

Mr. WEBER. Thank you, Mr. Chairman.

Mr. Allen, I'm sorry I couldn't be here for all of your testimony. I was here for Commissioner Fowler's and then I had to go to another meeting and I'm going to have to leave for another one in about 10 minutes, but I am glad that I could be here at least briefly for your testimony because the National Telephone Cooperative Association represents a lot of people in my district and they do a good job for them.

At the risk of running over a lot of the ground that you've already covered, I would just like to ask you to address one area.

When Chairman Fowler testified, I asked him about his comments on elasticity of demand. I'm sure you're familiar with his argument which is that the studies show that a 100-percent increase in rates results in a 1-percent reduction in demand.

I asked him if that was equally applicable to small business, big business, rural business, urban business, and he said to the best of his information it was. All I could tell him at the time was that intuitively that didn't make much sense to me.

I see in your testimony at the top of the page you talk about the elasticities issue and call into question, I believe, the argument that Chairman Fowler put forth, although you don't make specific reference of course to him in your testimony.

I would like you to expand on that a little bit because as I said intuitively it doesn't make sense to me to believe that a rural business person or a farmer with one telephone has the same elasticity of demand that a large company with many lines, but would you expand on that and tell me a little bit about what work you folks may have done on the elasticities question?

Mr. ALLEN. Well, as we would say back home, I don't know if Mr. Fowler and myself are comparing apples with apples.

He's talking about large holding companies and people that have a hundred trunks, many WAT lines, many FX lines and what have you, and I'm talking about customers probably back like in your district that's got from two to three to four lines and it's very difficult for he and I to relate the same.

I feel that if our phone bills increase 100 percent on the local side, we are definitely in trouble.

Mr. WEBER. I feel as you do. Let me just ask you, we are at a disadvantage, you and me, because they've got a study and we don't, and as you know in Washington a study is worth an awful lot.

Where would we look or is NTCA considering doing some kind of a study of their own to determine what indeed is the elasticity for those small rural businesses that you and I are concerned about?

Mr. ALLEN. Yes, I think we can request them to do that for us.

Mr. WEBER. I would really appreciate that. I think that's an important part of the case that we want to present as we try and put together a report from this committee and I would appreciate that.

Mr. Chairman, maybe we should submit in writing a request to NTCA for a study, if they can do it, on the elasticities question, which I really think is central to our whole case.

Mr. WYDEN. I think it would be extremely helpful.

Mr. **Weber**. Because I wasn't here for all of Mr. Allen's testimony I don't want to risk going over other ground that he may have already covered and I have no further questions.

Mr. **Wyden**. Let us say on behalf of the task force that if you could get us that study, say, in the next couple of months, we're going to be running until November, that would be timely and allow us to use it in a very helpful way.

Mr. **Allen**. I'll be happy to.

Mr. **Wyden**. Do you gentlemen have any further questions?

Mr. **Weber**. No, thank you, Mr. Chairman.

Mr. **Wyden**. Let me apologize to the witnesses for having to run off to the Rules Committee to testify about an upcoming bill. I just have one question, and I know the members have covered a number of important subjects.

Ms. Worthy, one question for you, do you think the FCC has made the case for access charges? Have they, in your view, been persuasive in their argument for why access charges are necessary? I was under the impression you could speak for the association on this point as well.

Ms. **Worthy**. I think on behalf of the association we would strongly submit that the FCC failed in the access charge docket to provide any data to support its contention that bypass was an imminent problem that required going to a flat rate end user charge.

However, I'm sure the chairman knows the court of appeals has just recently, as of June 12, affirmed the FCC's access charge decision.

However, I would still submit that I think the Court did not properly interpret the *Smith* v. *Illinois* decision and the National Association of Regulatory Utility Commissioners is going to appeal that decision. We are going to request cert from the Supreme Court, and I'm hopeful that the Court will grant the petition though they have declined to get involved in telecommunications up to this point.

The short answer is, absolutely not.

Mr. **Wyden**. Thank you and I think you heard from a lot of members today that we are going to try and appeal the FCC's access charge decision as well.

Ms. **Worthy**. Mr. Chairman, two things I wanted to bring to your attention.

I think it would be helpful if you could get what is presently accumulating in the docket in the New York commission's investigation into bypass. That is an ongoing proceeding and I have been reviewing the studies that have been coming out of there. I think it is helpful because not only is the industry doing studies but there have been some user groups who are also conducting bypass studies which I found to be very, very helpful.

Second, I wanted to just raise this point. I got the impression from questions raised by members that they thought that the waiver provisions in the access charge decision was applicable to the business customer. That is not my understanding.

The waiver provision, the way the order presently reads would only be eligible for the residential customers. If that is not the case then I think you should ask the FCC for a specific clarification on that matter.

Mr. **Wyden**. I'm very glad that you brought that last point up because I went away with the impression that there was a bit of confusion on that as well and, no, if a small business in Minnesota or a small business in Texas with two or three lines can't pay their phone bills there aren't any waivers. There aren't any people out there that are going to say, well, we're concerned about your contribution to the American economy so we're going to waive your phone bill.

There are no waivers for small business and I'm very pleased that you make that clear to the task force.

Thank you all very, very much for coming. We look forward to working with you in the days ahead.

[Mr. Allen's prepared statement with attachments follows:]

SUMMARY OF PREPARED STATEMENT OF OZLE L. ALLEN, MANAGER, BEN LOMAND RURAL TELEPHONE COOPERATIVE, INC., ON BEHALF OF THE NATIONAL TELEPHONE COOPERATIVE ASSOCIATION

Good Morning, Mr. Chairman and Members of the Committee. My name is Ozle L. Allen and I am the Manager of Ben Lomand Telephone Cooperative, Inc. in McMinnville, Tennessee. Today I also represent the National Telephone Cooperative Association, (NTCA).

NTCA is a national trade association comprised of approximately 450 locally owned and operated small telephone systems providing service in rural areas in 42 states. Most of these systems have obtained capital financing under the loan programs of the Rural Electrification Administration (REA).

The Ben Lomand Rural Telephone Cooperative is a subscriber-owned cooperative financed by REA. We are located in middle Tennessee and serve an area spanning approximately 80 miles North and South and 40 miles East and West. The principle income of our subscribers is from farming, coal mining and light industry.

Today I would like to focus attention on the impact of the FCC Access Charge decision on Ben Lomand and other small, rural telephone systems.

In this era of deregulation of the telephone industry and the AT&T divestiture, our efforts to reduce the burden on our subscribers and remain a viable business is frustrated by restraints from many sides. End user access charges, which threaten to decrease residental and small business subscribership, is but one of a number of pressures which could reverse the strides we have made to bring adequate telephone service to rural areas.

The latest opinion in the FCC Access Charge Decision, released last February, reaffirmed the Commission's plan to recover non-traffic sensitive plant costs through flat rate end user access charges. The first of these charges, those imposed on multiline businesses, went into effect on May 25. I have compiled information on the impact of business charges based on a random sampling of Ben Lomand business customers. The results of this survey, which I have included as part of the record, is telling. They clearly show that few businesses will realize any savings from the reduction of long-distance rates; while most will have to seek ways to make up the added access charge costs, either by cutting back their operations or passing the increase on to consumers. No one benefits in either scenario.

We know that the principal reason for imposing end-user charges, to prevent bypass, has never been documented. Even recent comments in response to the FCC's latest request for information on bypass failed to provide support for the idea that the primary consideration for customers who bypass the public network is cost.

NTCA remains opposed to the end-user access charge approach. Interestingly, FCC Chairman Fowler recently voiced some doubt about the wisdom of end-user charges as well.

NTCA also believes the eligibility criteria for high cost assistance as well as the reimbursement level will not ensure the congressionally mandated objective of universal service. Above all, we believe universal service at reasonable rates must be preserved. Interstate end-user charges will deal a severe blow to rural residential and small business customers. Rural subscribers make relatively few interstate long-distance calls, and therefore will not benefit from decreased long distance rates. A recent survey of Ben Lomand subscribers' calling patterns showed that 42% had toll bills of $15.00 or less in one month and 15% made no toll calls. However, the intrastate calls these subscribers make -- which have not been discounted -- are often business-related or emergency in nature.

In recent comments in the Access Charge proceeding, NTCA suggested an alternative approach of charging interexchange carriers a flat rate per-line charge for the use of the local exchange carrier's facilities. This would encourage interexchange carriers to use the public network and decrease their cost per unit of service.

To offset the impact of its access charge plan on high cost telephone systems, the FCC created a Universal Service Fund (USF). However, the level of reimbursement from the USF and the basis for determining a company's cost approved by the Commission in February, undermines the goal of universal service. NTCA supports a national average cost of debt in calculating a high cost factor, as opposed to a company's actual cost of debt, which the FCC supports. The latter calculation method would penalize REA borrowers, whose costs would appear to be lower.

We are also greatly concerned that toll rates will be deaveraged in the not-too-distant future. Deaveraging would have a devastating effect on rural toll rates in much the same way that airline deregulation made access to rural areas prohibitive. This is due to the high cost of toll links in rural areas as compared to those in urban areas.

One study by a small telephone company in Missouri recently found that deaveraging would result in 100+% increases in its subscribers' toll rates. NTCA urges Congress to support continuation of toll rate averaging nationwide. In the event toll rates were deaveraged, we would urge that mechanisms be instituted to lessen its impact on rural America.

Not only are small, rural telephone systems having to respond to major upheavals in the telephone industry, but simultaneously our main source of financial support, the Rural Electrification Administration (REA) is under attack. A bill to strengthen REA telephone and electric loan programs and afford REA borrowers like Ben Lomand the flexibility to seek non-government funding, H.R. 3050, passed this body easily in March, 1984. A similar measure, S. 1300, which NTCA strongly supports is under intense debate in the Senate at this time.

While we strive to be competitive in this new era of telephone industry deregulation we find ourselves fighting for a level playing field with our competition. An example is the pending cable TV legislation, H.R. 4103, which would allow commercial cable companies offering the same data transmission services as telephone systems to go unregulated. Cable companies competing with local telcos also present a threat to local exchanges by their tendency to cream-skim the more lucrative customers.

We have developed the best telephone system in the world because of the goal of universal service, which is mandated by Congress and spelled out in the Communications Act. I believe this policy is dealt a severe blow by the FCC's Access Charge Decision. The ramifications are far-reaching. The upward pressure on rural phone rates caused in large measure by this decision is not in the interest of rural America or the nation.

We appreciate your concern, Mr. Chairman and all the members of this Task Force and Committee, and for your interest in preserving universal telephone service at reasonable rates. We look forward to working with you towards that end. Thank you for this opportunity to testify.

PREPARED STATEMENT OF OZLE L. ALLEN, MANAGER, BEN LOMAND RURAL TELEPHONE COOPERATIVE, INC., ON BEHALF OF THE NATIONAL TELEPHONE COOPERATIVE ASSOCIATION

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The Ben Lomand Rural Telephone Cooperative is a subscriber-owned cooperative financed by REA. We are located in middle Tennessee and serve an area spanning approximately 80 miles North and South and 40 miles East and West. This equates to nearly 3200 square miles of rolling hills of farmland, small towns and communities. The principal income of our subscribers is from farming, coal mining and light industry.

The Cooperative serves approximately 18,659 subscribers in a four county area, with portions of six other counties which are also a part of our franchised area. This organization began its operation in late 1954, with approximately 2,000 customers. The latest statistics show that Ben Lomand is the fourth or fifth largest cooperative in the nation. It is interesting to note that when the cooperative was being organized, parts of the franchised area were offered to the Bell Company for one dollar ($1.00). Bell declined the offer because it did not believe the area was profitable enough to serve.

We are a 1-party system with an investment of nearly $35 million. This includes investment in cables, poles, buildings and central office equipment. We currently have 2,695.42 route miles of telephone lines in service.

Our area, like rural areas overall, tends to be poorer than the average. The average income per family in McMinnville is approximately $12,800 per year according to the Chamber of Commerce and FHMA. Approximately 3,000 households in our area cannot afford service.

I appreciate the opportunity to appear before you today to testify. I support the effort of the Chairman, the Committee and the Telephone Task Force members to preserve universal telephone service. As the manager of a small rural telephone cooperative, I am well aware that we will need this kind of support if small telephone systems are to survive and the rural consumer reap the benefits of improved telecommunications under the new access charge system that the FCC has designed.

Not only are small, rural telephone systems having to respond to major upheavals in the telephone industry, but simultaneously REA, our main source of financial support, is under attack. A bill to strengthen REA telephone and electric loan programs and afford REA borrowers like Ben Lomand the flexibility to seek non-government funding, H.R. 3050, passed this body easily in March, 1984. A similar measure, S. 1300, is under intense debate in the Senate at this time. Moreover, this Administration has been a primary opponent of attempts to ensure the solvency of the REA program, a program which is largely responsible for bringing basic telephone service to rural America.

While we strive to be competitive in this new era of deregulation, we find ourselves fighting for a level playing field with our competition. An example is the pending cable TV legislation, H.R. 4103, which would deny telephone systems the same treatment as commercial cable companies offering the same data transmission services. Cable companies competing with local telcos also present a threat to local exchanges by their tendency to cream-skim the more lucrative customers.

Our efforts to reduce the burden on our subscribers and stay in business by diversifying our operations is frustrated by restraints from many sides. End user access charges, which threaten to cut off residental and small business subscribers, is but one of a number of pressures which could reverse the strides we have made to bring adequate telephone service to rural areas.

We have developed the best telephone system in the world because of the congressionally mandated goal of universal telephone service. The goal is stated in the Communications Act: "to make available, so far as possible, to all the people of the United States a rapid, efficient, Nationwide, and world-wide wire and radio communication service with adequate facilities at reasonable charges...." This mandate was clearly interpreted by the FCC in its access charge decision Third Report & Order. The Commission stated, "We have concluded that the "available...to all" language does contemplate that telephone exchange service should be made available at reasonable rates."[1] However, I believe the public policy goal of universal service at reasonable rates has been shaken by the Commission's Access Charge decision.

Today, I would like to focus on the impact of the FCC decision on Ben Lomand and other small, rural telephone systems.

As a rule, the over 950 REA borrowers provide service to rural, high-cost areas. Since serving sparsely settled areas requires more plant (cable, poles, etc.) to serve each subscriber, REA borrowers typically must invest much more on a per-subscriber basis than do the larger telephone systems. REA borrowers have invested an average of $1,836.36 per subscriber. For Ben Lomand the amount is $1,888.55 per subscriber. Many rural telephone systems have as much as 90% of their investment in non-traffic sensitive (NTS) plant, while the average Bell Company, as of 1981, had about 50%.

REA borrowers have an average of 5.47 subscribers per route mile of line (1982 statistics). REA borrowers have an average local area calling scope of about 2,000 people. Most urban local calling scope reaches hundreds of thousands and even millions.

Today, a significant portion of the expense of local facilities which are used by both long distance and local services is allocated to and considered a cost of long-distance service. Traditionally, these costs have been recovered from a pool of interstate long distance revenues. The costs of these local facilities are allocated in the NARUC-FCC Separations Manual.

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[1] MTS/WATS Market Structure, CC Docket 78-72, Third Report & Order, December 22, 1982, p. 28. (hereinafter Third Report & Order).

NTCA recognizes that there is a need to revise the present system of compensation of local exchange carriers for origination and termination of intercity traffic in order to "deload toll". But we do not believe this should be accomplished through end-user charges and at the expense of rural subscribers.

FCC Access Charge Decision

In January, 1984 the FCC issued its latest opinion in the access and related Joint Board proceedings. It did so in the face of impending legislation which would have limited or eliminated end-user access charges. The January opinion reaffirmed the plan to recover nontraffic sensitive plant costs through flat rate end-user access charges. It also called for additional proceedings to study issues including the impact of access charges on small telephone systems, and the level of assistance to high cost companies and bypass. Those proceedings, announced in April, 1984, are currently underway.

The FCC included in its access charge plan a Universal Service Fund (USF) to assist high cost local companies in keeping access charges reasonable. A Federal/State Joint Board was empowered to recommend the level of high cost reimbursement. In January, 1984, the FCC adopted the Joint Board's recommendations to limit reimbursement of NTS local exchange plant costs to a portion of NTS cost in excess of 115% of the national average. The Joint Board proposal would allow interstate access charges in rural areas to rise as high as 200% of the national average charge.

In addition, the FCC adopted the Joint Board's recommendation that the high cost factor be calculated based on an individual company's actual cost of debt and an industry average return on equity. This method would penalize rural telephone systems who borrow from REA since they have a low cost of debt and a higher cost of equity than the industry average. This method also increases the eligibility of large companies for high cost assistance. The Commission was persuaded that the cost issue was so important, it directed the Joint Board to restudy the calculation method. We hope that the Board will look into this issue thoroughly and objectively.

Critique of FCC Decision:

The Commission's decision was motivated largely by fears that the public network would lose high volume users through bypass. However, the FCC decision failed to offer quantitative data to justify its premise. Without satisfactory evidence, it is inconceivable that the Commission could accept subscriber drop-off as an acceptable consequence.

The FCC also based its decision on the hypothesis that the demand for local service, including access charges, was relatively inelastic. The Commission subsequently admitted that elasticity studies, like those it had previously relied upon, were not conclusive.[2]

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[2] MTS/WATS Market Structure, CC Docket 78-72, Memorandum, Opinion & Order, released February 15, 1984, p. 6.

The "elasticities" issue has not been satisfactorily answered, largely because the prices included in most, if not all, of the elasticity studies offered to the Commission examine prices for telephone service that are either far too low or include only one component of the total cost of access. Furthermore, by examining national averages, the studies bear little or no relationship to prices for service in rural areas under the Commission's access charge plan. In general, monthly NTS revenue requirements in rural areas are far higher than NTS revenue requirements for the industry as a whole.

In short, the "elasticities of demand" for rural areas have not been adequately examined. Subscriber drop-off will be more severe in rural areas than in urban or suburban areas which face lower rate increases. All the studies, even at low $2.00 or $4.00 end-user access charges agree that drop-off does occur in direct relation to increases in those charges.

The Commission's assertion that multi-line business access charges in effect since May 25, 1984, would not be high enough to reduce the levels of business subscriber lines[3] is clearly directed at large businesses exclusively. For small businesses, which are the backbone of rural areas such as McMinnville, an immediate increase of $12 or more is severe enough to cause subscribers to drop lines or drop service.

I recently directed a study to be made of the impact of the multi-line access charges on our business customers. The results, (Attached as Appendix I) dramatically show that the great majority of our local businesses will experience a sizable increase in cost as a result of the access charges. This data proves that the benefits from reduction in long-distance charges is minimal or nonexistent.

A study by REA was based on a post-transition era, and assumed deregulation of customer premise equipment (CPE) and inside wiring, as well as on the High Cost Factor (CC Docket 80-286) adopted by the FCC January, 1984. According to the REA study, 650 REA borrowers' average monthly subscriber rates, including projected interstate and intrastate access charges, would increase 100% or more over the 1981 local rate. For over two-thirds of REA borrowers, interstate access charges will at least double local rates.

Another fundamental premise of the FCC access charge decision is that implementing end user charges would reduce bypass. Yet the Commission has never adequately defined bypass nor has it been able to quantify the nature of the bypass threat to the public telephone network. In April, 1984 the FCC sought comments on the bypass issue. No meaningful information to support the Commission's supposition has been presented to date. Instead, commenting parties are simply repeating claims that cost is the primary reason for seeking alternative telephone facilities. Yet, the comments themselves indicate that service is the dominant motive for bypass.[4]

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[3] Id.

[4] Responses to Public Notice titled "Request for Data, Information, and (Footnote Continued)

Despite insufficient data, the Commission clings to its presumption that deterring bypass will benefit universal service. Yet for all that the FCC knows, the amount of customer rate increases avoided as a result of bypass deferred may be significantly less than the increases which will result from imposition of the access charge plan, as shown in Appendix I.

NTCA Position

NTCA believes that there are several issues which need to be addressed in legislation to preserve universal service at reasonable rates.

Preservation of Universal Service at Reasonable Rates.

Although the FCC has faithfully recited its intention to preserve universal service, it is my belief that it has thrown the balance too far in favor of the interexchange carriers and large users at the expense of local subscribers. In some cases this will be merely inequitable; in others it will seriously endanger universal service.

The FCC is presently reviewing comments on the level of high cost assistance and other major issues in the access charge proceedings. However, statements emanating from the Commission dampen my expectations for an objective review of those issues. A paper issued by the FCC's Office of Plans and Policy (OPP) in March, 1984 entitled "The Effects of Higher Telephone Prices on Universal Service" questions the necessity of high cost assistance. "Cost differences provide an exceedingly weak basis on which to justify subsidies."[5] The paper evidences indifference toward large increases in local telephone rates in rural areas and overstates the benefits to rural subscribers from cheaper long-distance rates. In fact, a recent survey of Ben Lomand subscribers' calling patterns indicate that 42% of subscribers had toll bills of $5.00 or less in a month and 15% of our subscribers made no toll calls (Attached as Appendix I). The so-called benefits of lower prices for long-distance calling cited by the OPP in rural areas are minimal.

The High Cost Factor recommended by the Joint Board is not adequate to protect universal telephone service, especially since State public service commissions are under enormous pressure, both practical and political, to implement similar access charges for intrastate service. In many high cost areas, these intrastate charges will be substantially greater than the FCC charges.

Legislation passed by the House November 11, 1983, H.R. 4102, included mechanisms which would have afforded greater support to high cost rural telephone systems and would have protected universal service.

(Footnote Continued)
Studies Related to Bypass of the Public Switched Network" (released March 28, 1984).

[5] Kenneth Gordon, John Haring, FCC/OPP Working Paper Series, Number 10, "The Effects of Higher Telephone Prices on Universal Service", March, 1984, p. 34.

Eliminate the End-User Charge

Rural Americans, residential and small business subscribers alike are outraged by the concept of the end-user paying a long-distance charge whether or not one makes long-distance calls. As I stated earlier, my subscribers make few, if any, toll calls. Therefore under the access charge scheme, they are being penalized twice, once by the end-user charge, and a second time because they will not benefit from lower long-distance rates. The toll calls our subscribers do make are often out of necessity, either for everyday business or emergencies. These intrastate toll calls, which make up the majority of toll calls made by Ben Lomand business customers are not affected by the long-distance discount of 6.1%, recently ordered by the Commission (Appendix I). Once again, rural subscribers are penalized because their "community" extends over a large, sparsely populated area.

NTCA supports the elimination of the end user access charge and supports the continuation of a carriers' charge in a manner that is fair and reasonable for all. We believe it makes more sense for interexchange carriers to be charged the access fee. Through control of their pricing strategies they have the flexibility to distribute the costs among their users. Local exchange origination and termination functions are essential to the operations of interexchange carriers and are not otherwise available on a universal basis. It is the interexchange carrier which requires the use of the exchange carriers' facilities and not the other way around. At a minimum, the costs of the local facilities should be shared between those who use them, including interexchange carriers. Interestingly, at a recent public meeting FCC Chairman Fowler himself expressed some doubt about end-user charges.

National universal service policies and the REA policy of area coverage have encouraged extending service without regard to individual subscriber line costs. This means that we are required by law to provide telephone service to any permanent resident or business within our service area that requests it, without regard to the cost to Ben Lomand of providing that service. For example, we might be required to provide 3-4 miles of facilities for one subscriber at no extra cost to that customer.

In recent comments in the Access Charge proceeding (CC Docket 78-72, Phase I), NTCA proposed that interexchange carriers pay the interstate portion of NTS costs on a flat rate, per-line, monthly basis. The interexchange carriers, after all, need and use the local network in order to provide service. This carrier line charge alternative to the customers end-user charge will encourage interexchange carriers to increase their use of the public network, and thereby decrease their cost per unit of service. (This in turn will discourage bypass.)

We believe this proposal accomplishes the objective of deloading toll. Yet, it does not place an unfair burden on subscribers, particularly those in rural areas where local telephone rates will increase significantly under deregulation.

Some states have already rejected the rationale behind end user access charges. Most recently, Washington State rejected an intrastate end-user plan. So to did the Texas Public Utilities Commission (PUC). After extensive proceedings the Texas PUC refused to impose flat rate end-user charges on residential or multiline business subscribers because they found "the imposition of end-user charges is a threat to...universal service."[6] The PUC also noted that "High cost, low density companies are effected most by the disruption in the toll revenue stream caused by divestiture."[7]

Adopt a High Cost Factor

Some measures proposed a Universal Service Fund for the recovery of NTS costs. If adopted, such a mechanism should allow recovery of 100% of the costs over 110% of the national average. Such a formula was in S. 898, the telecommunications bill which passed the Senate in 1981 and in H.R. 5158 which passed out of the House Subcommittee on Telecommunications in 1982.

NTCA strongly opposes the recommendation of the Joint Board that the individual company's actual cost of debt be used in its cost calculation. This requirement penalizes those telephone systems that borrow from the programs of the REA because it lowers their costs relative to those of non-REA borrowers. National average NTS costs are calculated using a national average cost of debt; for consistency the national average cost of debt should also be used to calculate the high cost factor.

The failure to treat all elements of capital similarly is discriminatory and greatly detrimental to small rural companies financed by REA and their subscribers. The proposal to use the 17.44 equity component of the 12.75% composite rate allowed AT&T by the Commission in Docket 79-63[8] necessarily is based upon an assumption that all companies have equity ratios comparable to AT&T, i.e. 50.2%. The well known facts are to the contrary, however.

Moreover, the Commission has never determined a cost of equity for over 1,000 REA borrower companies, it cannot say precisely what their actual total capital costs are. There can be little question however, that highly leveraged companies have higher risks and more difficulty obtaining equity than companies with comparatively higher equity ratios. In sum, the Joint Board's method of calculating cost is a distortion and will have an unequal impact on rural subscribers.

Maintain Nationwide Toll Rate Averaging

All low-density toll routes, such as those in rural areas, benefit from our current national policy of toll rate averaging. Toll rate averaging is a pricing concept whereby a customer pays equally for interstate calls across equal distances, time of day and duration. There are clear indications that a move to deaverage toll rates is imminent.

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[6] Texas P.U.C., Docket No. 5113, Proposed Order & Examiner's Report, April 2, 1984, p.48.

[7] Id., p. 46.

[8] 86 FCC 2d 221 (1981).

Toll rate deaveraging would have a dramatic effect on rural toll rates since a rural toll link costs six times as much as an equivalent urban toll route. A recent study initiated by a telephone cooperative in rural Missouri found that if toll rates were deaveraged on a route-by-route basis, the charge for interstate toll calls would increase by 108% while intrastate toll calls would increase by 124%. (See Appendix II, Attached.) AT&T has indicated in FCC proceedings on long-term deregulation of AT&T that it would seek deaveraging under certain circumstances. Like airline deregulation, toll rate deaveraging will further isolate rural America.

Rural users throughout the country have local calling areas with fewer telephones to reach than urban users. Consequently, rural users are more dependent on long distance service to reach essential services such as doctors, hospitals, schools, etc.

NTCA believes legislation should address the higher cost of rural toll connecting links. We urge Congress to include in universal service legislation an explicit statement of support for continued averaging of toll rates nationwide. If legislation is adopted to provide for carrier access charges, provisions should be made to protect deaveraging of toll rates in high areas.

Minimize Regulation of Small Telephone Companies.

Under Section 2(b) of Title II of the Communications Act, small exchange telephone companies, as intrastate carriers, are exempt from many of the FCC regulations and reporting requirements. Unless carefully designed, new mechanisms for recovering local costs may impose heavy new reporting and filing requirements on small companies. NTCA also supports the concept of equal interconnection or equal access, as it is known. However, we urge that economically infeasible requirements for such interconnection not be imposed on small companies with electro-mechanical or older switches. At a minimum, implementation schedules should recognize the technical and financial constraints of small companies and allow flexibility in meeting these standards. NTCA urges Congress in considering common carrier legislation to continue the Section 2(b)(2) exemption for small local telephone companies.

Conclusion

Finally, I would like to point out that rural telephone systems like Ben Lomand are also small businesses and all end-user access charges impact on our business. When subscriber drop-off occurs due to end-user access charges, our cooperative loses business. This in turn hurts our community because we contribute greatly to the local economy. We employ a substantial number of residents and try to purchase all of our equipment, including vehicles, from local businesses. When our revenues fall off, we have to let employees go or increase our rates.

Our constituents, on whose behalf I am speaking to you today, are also our customers. Therefore, we ask you to reverse the movement to an access charge system because it is unfair and also because it does not make economic sense to undermine a major contributor to the rural economy - the telephone system.

The ramifications of the FCC access charge decision are wide-ranging. If interstate and intrastate access fees increase the price of local telephone service by over 100%, as they will in high cost areas, a significant portion of subscribers will drop off the network. This will be detrimental to all users of the network.

The question that this Committee and eventually the Congress must ask is how many people will have to disconnect their telephone service due to rate increases before we have an end to universal service?

Moreover, since agriculture is one of the linchpins of our economy as well as our foreign trade, how much will rural telephone service and the nation be injured by the economic price experiment of shifting costs from the big businesses and other heavy toll users to the average residential American and small business? How will higher telephone rates affect rural development of the infrastructure of rural America? Those who drop off the network will not have rapid access to police, fire, and medical service. Businesses will not be able to contact their employees immediately. The rural and urban poor will be isolated without adequate transportation or communications. Is the benefit worth the risk? Is the public interest being served by the FCC access charge system? We in rural America do not believe it is, and share the concern with residential and small business customers.

We appreciate your concern, Mr. Chairman and all the members of the Committee, and your interest in preserving universal telephone service at reasonable rates. We look forward to working with you to preserve affordable telephone service. Thank you for this opportunity to testify.

Appendix I

Ben Lomand Rural Telephone Cooperative, Inc.
311 North Chancery Street — Telephone (615) 668-4136
P. O. Box 670
McMinnville, Tennessee 37110

Mr. Chairman,
and Other Members of the Committee on Small Business:
June 26, 1984

May I say Thanks for this opportunity of appearing before this committee. Our objective is to try to inform your group of interested Congressmen that rural people, Business and Residence do have a financial problem with the end-user access charge on their telephone bills.

First, with the mulit-line access charge already effective, our multi-line business subscribers have definitely felt a financial burden from this implementation.

Our cooperative has completed a study by checking 22 subscribers at random, large and small. These range from 16 lines per subscriber down to (2) lines per subscriber for a comparison of rates with the access charge and the 6.1 percent toll reduction on interstate calls versus our charge without either of these items being in effect. This study is based upon the first month's billing after the effective date of May 25,1984. These 22 subscribers used for the study had a total of 125 lines terminating in their businesses, giving an average of 5 plus trunks per subscriber. Due to the amount of toll used, their interlata and interstate toll calls amounted to savings of only $318.65(this is using the 6.1 percent reduction), then with the $6.00 per line multiplied by the 125 trunks would cause added charges of $750.00 more for these people. By simple calculation, the difference in the savings and the charges due to this process amounted to $431.35 for the study group. By dividing the 125 trunks into this figure, this would be approximately $3.45 per line rate increase. The subscriber with the average of 5 trunks per business would receive an additional monthly bill of $17.25 caused by the multi-line business access charge.

I know of no better statistics to prove the fact that our multi-line business subscribers have received an increase in their monthly telephone bill by this mandate. Please keep in mind, there is another group of subscribers that do not make any interstate calls. Think of the burden caused for them just to have capabilities to access to the long distance network.

In my opinion, if access charges are made effective on or for the residence subscribers, the cooperative will be more affected. Due to the rural nature of our cooperative, the ratio of residence subscribers is much greater than the business subscribers served.

According to another study that our cooperative conducted for a two (2) months period, it proved that 15% of our subscribers do not make any toll calls per billing month. For another group, 42% of subscribers make $5.00 or less per month. By these proven facts, from the study conducted, our rural subscribers and your constituents are going to be pressed financially which will be caused by no choice of theirs.

In summation, we would recommend that if these charges are due from anyone, let's add them on to the carriers of toll. First of all, these charges are related to interstate jurisdiction controlled by the FCC and the local loop and local subscriber should be controlled by the State Regulators. It seems also that this deserves to have a thorough study in relation to jurisdiction of governing bodies.

I will be leaving with each member a packet containing the research and statistical studies that this presentation was based upon. I feel that it is a great honor to be able to appear in this capacity. Maybe in someway, my small contributions will help protect our smaller business subscribers and residence subscribers.

THANKS AGAIN,

Ozle L. Allen

Ozle L. Allen,
Manager

TOLL AND ACCESS CHARGE ANALYSIS
(Sample Taken from First Month's Billing)

Subscriber Number	Total Toll	Less Intralata	Equals Interlata & Interstate Toll	(Rate Reduction) X 6.1%	No. Access Lines	Cost each Access Line	Access Charge Amounts
1.	$140.27	$128.65	$ 11.62	.71	3	6.00	$ 18.00
2.	-0-	-0-	-0-	-0-	11	6.00	66.00
3.	189.21	187.93	1.28	.08	2	6.00	12.00
4.	27.66	3.97	23.69	1.45	2	6.00	12.00
5.	300.91	81.36	219.53	13.39	16	6.00	96.00
6.	106.96	104.37	2.59	.16	5	6.00	30.00
7.	194.27	29.95	164.32	10.02	10	6.00	60.00
8.	746.61	237.86	508.75	31.03	4	6.00	24.00
9.	943.61	753.94	189.67	11.57	8	6.00	48.00
10.	5.28	4.78	.50	.03	4	6.00	24.00
11.	212.54	38.55	173.99	10.61	10	6.00	60.00
12.	1,364.50	338.35	1,026.15	62.60	9	6.00	54.00
13.	325.29	158.74	166.55	10.16	7	6.00	42.00
14.	1,030.49	569.87	460.62	28.10	5	6.00	30.00
15.	937.94	552.43	385.51	23.52	4	6.00	24.00
16.	55.81	49.30	6.51	.40	3	6.00	18.00
17.	161.07	101.62	59.45	3.63	3	6.00	18.00
18.	412.65	243.41	169.24	10.32	3	6.00	18.00
19.	159.76	60.73	99.03	6.04	3	6.00	18.00
20.	341.61	87.40	254.21	15.54	4	6.00	24.00
21.	409.20	88.58	320.62	19.56	5	6.00	30.00
22.	1,351.62	372.44	979.18	59.73	4	6.00	24.00
	Estimated toll reduction			$ 318.65	125		$ 750.00

	The cost of the access charges.	$ 750.00
6.1%	Reduction of the toll amounted to	318.65
	Difference betwen the rate reduction cost and the charge to access to the total of 125 lines	$ 431.35

125 Subscriber divided into
$431.35

This Toll Study shows that due to access charges being addedto multi-line subscribers these 125 subscribers paid approximately $3.45 more per line with the addition of access charges less the rate reduction than they would have if no changes had taken place.

Conducted by Ozle L.- Allen

RADIO NEWS REPORTS INFORMING THE PUBLIC OF THE ACCESS CHARGES INCLUDED:

(1) Interview with local radio station reporter after the CBS News had visited the cooperative in August 1983.

(2) Interview with local radio station manager on a 30-minute talk program which the manager of the radio station has daily. This covered deregulation and the end-user access charges. (Held the latter part of 1983)

(3) Public Service Commissioner, Keith Bissell from the Nashville, Tenn. office had an interview with the manager of one of the local radio stations regarding deregulation and access charges.

(4) Many visits were made to McMinnville and adjoining counties by representatives of the Public Service Commission to urge citizens to write their congressmen in an effort to kill the bill for access charges.

(5) Ben Lomand had petitions at all county fairs in their service areas soliciting persons to sign in support of killing the access charges. These signed petitions were mailed to the Public Service Commission in Nashville, Tenn.

(6) Mr. Allen appeared on a panel for Albert Gore in Nashville, Tenn. to speak out against the implementation of access charges. This panel was entitled Tennessee Telephone Council and it met in Nashville on August 13, 1983.

The Ben Lomand Rural Telephone Cooperative is a subscriber owned cooperative - financed by REA (Rural Electrification Administration) governed by a Board of Directors. These Directors are elected by the subscribers which hire a manager to direct the day to day operations of the cooperative. We are located in Middle Tennessee and serve an area spanning approximately 80 miles North and South and 40 miles East and West. This equates to nearly 3200 square miles of rolling hills of farmland, small towns, and communities. The principle income of our subscribers is from farming, coal mining, and light industry.

The cooperative serves approximately 18,659 subscribers in a (4) county area, with portions of (6) six other counties which are also a part of our franchised area. This organization was chartered in 1952, and started operations in late 1954, with approximately 2,000 (Dial) customers. The cooperative has grown to our present size of 18,659 subscribers. As of our latest statistics, Ben Lomand is the fourth or fifth largest cooperative in the nation. When the cooperative was being organized, parts of the franchised area were offered to the Bell Company for one dollar ($1.00). The telephone plant and the future potential was not secure enough, in their evaluation, for them to take and serve profitably. They chose to turn the offer down. We acquired the territory and have proven Bell's theory incorrect.

We are a 98.6 per cent 1-party system with 4-party service offered at the request of the subscriber. Our telephone plant in-service investment is nearly 35 million dollars. This investment is in cables, poles, buildings, central office equipment, etc. To serve the 18,659 subscribers, we have 2,695.42 route miles of line in service. Our subscriber density is only 7 subscribers per mile of line. I would like to point out there are still approximately 3,000 homes that remain without telephone service. We are ready and most willing to provide this service, when the economical trend is such that these people are financially ready to have and maintain telephone service.

The average income per family is approximately $12,800.per year according to the Chamber of Commerce and FHma. Our income level is low compared to other sections of the country.

Due to the divestiture of AT & T, Bell Company and the deregulation by the FCC (Federal Communications Commission), it is most evident that our rates likely will sky-rocket to the point that our people, at the income level on which they are, will not be able to afford the basic local service.

According to our own statistical data, 15% of our subscribers do not make any long distance calls, 42% make $5.00 or less. Must these people be assessed an end-user fee for the capabilities of a service not used?

Under our present billing, the telephone cooperative is providing its subscribers with availabilities for local and long distance capabilities. The subscriber pays for using the toll network concurring with Inter/Intra rates based upon the number of minutes the cirucit is accessed. The rates, local and toll, are sufficient according to our governing bodies to substantiate the cooperative's business investments, maintenance and the day to day operations.

Why should the end-user have add-ons such as end-user access charges assessed to them? In our opinion, these access charges would be used to finance networks or to maintain existing systems that belong to a completely different business venture. Our subscribers should not have to be committed to finance these other ventures. Our feeling is that each investor should stand alone in his business venture, totally allowing the end-user to pay for what portion of time that he uses these common toll circuits that are installed and being installed for the profit of these other investors.

In conclusion, and with our supporting data, we feel our subscribers could best be represented by shifting the additional cost to the interexchange carriers. This would allow only those subscribers who use the carrier's services to pay the increased charges.

STATISTICAL DATA
BEN LOMAND RURAL TELEPHONE
COOPERATIVE, INC.

The Ben Lomand Rural Telephone Cooperative - headquarters in McMinnville, Tennessee. The cooperative was organized October 1, 1954. Presently, we have (1) branch office in Sparta, Tenn. and (1) branch office in Tracy City, Tenn.

The cooperative is governed by 9 Board of Directors selected by the membership representing the respective areas.

Serves 4 counties completely
" 6 counties partially

No. of employees including the branch offices 76.

Customer owned organization - financed by REA (Rural Electrification Administration)

Total no. of Access Lines 19,024
No. of Residence Access lines 17,183 As of December 31, 1983
No. of Business Access lines 1,841 - (Of these lines 868 are Multi-lines and are charged the access charge)
Total no. of Telephones 28,441 (leased)
Total Residence Telephones 24,639
Total Business Telephones 3,802

98.61% 1-party
.90% 4-party
.49% 2-party
Total no. Miles of Line 2,695.42 (Route miles) as of 12-31-83
Approximately 7 subscribers per mile of line.

Total Exchanges served 17 - All of these exchange offices offer touchtone service - all are equipped for automatic toll identification.
(1) Electronic Exchange Office
(3) Digital Exchange Offices
*(13) Mechanical Step Exchanges Offices

* The number 13 will soon decrease to 12, due to the fact that one of these step offices is being changed at the present time to a digital office.

Residential Rates		Switching Charge
Rotary Dial	1-R	9.50 + 1.00 for telephone
" "	2-R	8.00 + 1.00 for telephone
" "	4-R	7.25 + 1.00 for telephone
Touchtone	1-R	10.50 + 1.30 for telephone
"	2-R	9.00 + 1.30 for telephone
"	4-R	8.25 + 1.30 for telephone
Business Rate		
Rotary Dial	1-B	18.50 + 1.50 for telephone
" "	2-B	13.50 + 1.50 for telephone
" "	4-B	Not Available
Touchtone	1-B	19.50 + 1.80 for telephone
"	2-B	14.50 + 1.80 for telephone
"	4-B	Not available

2-Party Service available only when technically feasible for the company and when one subscriber is responsible for service at both locations being served on the 2-Party access line.

Average cost of investment per subscriber	$ 1,888.55
Revenue per subscriber per month - yr. of 83	31.75
Total amount of investment 12-31-83	35,049,637.

Total amount of revenue 1983 --Local Service and Toll--------------------$ 7,034,364.00

Local Service Revenue1983	$ 3,299,077.
Toll Service Revenue 1983	3,735,287.

Of the toll revenue, amounts which were Intra and Inter are

Intra	$ 2,091,761 -	56%
Inter	1,643,526 -	44%

TAXES PAID OUT 1983

Ad Valorem (Property)	$ 330,454.38
State Sales	348,066.77
Federal Excise	218,867.13

In the counties served entirely by Ben Lomand, we are the largest utility tay payer.

AMORTIZATION OF CPE (Customer Premise Equipment)

Amount of investment end of 1983	1,254,366.84	
Amount of depreciation reserve end(83)	(487,390.21)	
Net amount to be charged off	766,976.63	over 60 months (5 yrs.)

Average monthly amortization is $ 16,072.52

The cooperative has its own computer department equipped with an IBM Systems 36. Billing to our 18,659 subscribers is done by this computer department. This is done on the 5th, 10th, 15th and 25th of each month.

The cooperative has its own maintenance and construction force.

INTEREST ON GOVERNMENT LOANS for year of 1983	$ 1,220,626.
Funds - Borrowed from REA & RTB as of 12-31-83	25,591,177. average interest is .05

TOLL STUDY FOR JUNE 1983

No. of subscribers involved	100%	- 18,659
Subscribers with 0.00 toll	15%	- 2,789
Subscribers with .01 to $5.00 toll	27%	- 5,132
Total subscribers with $5.00 or less	42%	7,921

Note (1) This same study was conducted in May 1983 with almost identical results. Results varied less than ½%.

(2) Assuming toll decreased by 20%, due to competition, 82% of our subscribers would still realize an increase in their bill due to the low amount of toll used.

(3) The above study includes the total amount of toll billed to a customer. If Intra and Inter could have been separated, then the results would have been more startling, because only 44% of all toll calls made were interstate calls.

APPENDIX II

STUDY ON TOLL RATE DEAVERAGING

Enclosed is a copy of a study on toll rate deaveraging in a telephone cooperative in rural Missouri.

In summary, if route-by-route toll deaveraging took place, and no support mechanisms were put in place, the average minutes of use (MOU) billed to the cooperative's customers would be as follows:

Interstate

Present M.O.U. billed = .145
New M.O.U. billed = .302 or 108% increase

Intrastate

Present M.O.U. billed = .108
New M.O.U. billed = .243 or 124% increase

June, 1984

MAY 1984
RECEIVED
GENERAL MANAGER

May 16, 1984

Bob McArton
1001 Kentucky Street
Princeton, MO 64673

Dear Bob:

On the attached schedules, I have attempted to quantify the increase in AT&T toll rates which would result if they elected to use cost based, deaveraged toll rates in your serving areas.

In 1984 the cost associated with a toll call will consist of:

Before FCC order release 5/15/84		Intrastate	
	Interstate	Intralata	Interlata
1. Originating access costs	.122558	.083808	.083808
2. AT&T facility costs	.108965	0	.088375
3. Terminating access costs	.082497	.082497	.082497
TOTAL	.314020	.166305	.254680

After FCC order released 5/15/84		Intrastate	
	Interstate	Intralata	Interlata
1. Originating access costs	.122558	.083808	.083808
2. AT&T facility costs	.104767	0	.084175
3. Terminating access costs	.074597	.074597	.074597
TOTAL	.301922	.158405	.242580

I used your projected cost per access minute as the originating access cost and NECA's currently filed tariff rates and NECA as revised by the FCC on 5/15/84 as the terminating access costs. I have also estimated the AT&T facility cost. This was accomplished by maintaining the relationship of AT&T revenue to their access costs. I have enclosed a copy of AT&T's letter and the schedule which I used to get the numbers.
Again based on the projected access costs, AT&T billing will have to go up considerably. This should have no affect on Grand River's revenues as long as usage does not fall, as your revenues will be based on access charges rather than toll billings.

As you can see, we had to make several assumptions in developing these numbers. Please call if you would like to discuss this subject further.

Very truly yours,

Earl

Earl Bishop

GVNW INC./MANAGEMENT
P.O. Box 25969 Colorado Springs, CO 80936 (303) 599-5942

Mr. WYDEN. Our next panel will be Mr. John J. Motley, director of Federal legislation, National Federation of Independent Business; Mr. Russell B. Spencer, Jr., president, Independence Communications, Inc., Norristown, PA; and I understand he will have Mr. Thomas Gantert, a small business consultant from Memphis, TN. Then one of my own constituents, Mr. Joseph Bernard, owner of J. M. Bernard's Garage and Service Station and president of Community Hospital Board in Portland, OR.

I think at this point I want to exercise a prerogative of the Chair and hear the strong loud voice of Portland, OR. Let us begin with Mr. Bernard.

Joe, we are very pleased that you were able to come back today. Your contributions in Portland in health care and small business are well known to people of Portland generally and specifically to me and we're just delighted that you could be here.

Let's begin with Mr. Bernard and we'll go right down the line. I think, Joe, too, for the sake of time, if you could just highlight some of your key points and we'll make your prepared statement part of the record.

[Mr. Bernard's prepared statement follows:]

PREPARED STATEMENT OF JOSEPH M. BERNARD, JR., OWNER, J. M. BERNARD'S GARAGE AND SERVICE STATION; PRESIDENT, DWYER COMMUNITY HOSPITAL BOARD; PRESIDENT, PORTLAND AUTOMOTIVE TRADES ASSOCIATION, INC., AND PAST STATE PRESIDENT, AUTOMOTIVE SERVICE COUNCILS

I am the current president of the Portland Automotive Trades Association, Inc., a state-wide organization with approximately 350 member firms. I am a past state president of Automotive Service Councils, an organization with approximately 200 members in Oregon.

I am here today as the authorized spokesman for both organizations. Given some overlapping memberships, it is fair to say that I am speaking for some 450 Oregon small businesses.

Both organizations are opposed to the mandatory imposition of Measured Business Service as proposed by Pacific Northwest Bell. We oppose measured service because of its direct and unfair economic impact on small service businesses, and for the lack of a convincing argument that it will, in any way, improve service or is required to sustain the level of existing service.

The businesses I speak for have two common characteristics: First, they all fall within the federal government's definition of a small business. The majority having fewer than five (5) employees. Some even fall through the federal definition because they are only one or two persons in size.

After size, their second common characteristic is that they are service businesses. This means they are labor intensive. To be profitable as labor intensive businesses, operators must work on the lean side at all times, keeping productivity high with the fewest employees. Instead of adding personnel, our industry relies heavily on all available time-saving technology. This brings me to the point of this testimony. It is a necessity for small businesses in the automotive trades to have affordable telephone service.

NECESSITY OF CALL FREQUENCY

I cannot overstate the importance of a telephone to the automotive service industry. My own business was founded by my father over 50 years ago. It has grown up with Milwaukie and with the telephone as a tool of business. Our business is involved in all three major areas of automotive service. We are a retail gasoline dealership. We perform all major mechanical work. We sell the parts and accessories required to operate motor vehicles economically and safely. Each of these operations, when performed separately, or together as we do, requires telephone use to a lesser or greater degree.

To illustrate the vital role the telephone plays in an automotive service operation, take a typical repair job. A mechanical repair job can involve up to four or more outgoing telephone calls before any work can be performed. A typical job requires two calls to the customer. One call is to explain our diagnosis and to secure authorization to proceed, the other is for notification of the job's completion. The remaining calls are made to parts suppliers, either a jobber or new car dealer, or a warehouse - distributor.

Locating parts is a time consuming process. The distribution system for automotive parts is a complex matrix because of the varied types of vehicles and manufacturers supplying parts.

Parts locating is almost always done by phone to save time. Because it is difficult to pass on this time in the form of charges to the customer, repair shops try to find the right source, and the one from which the part or parts can be most quickly obtained. This requires at least two calls, even to obtain the most common parts. A half dozen calls to parts suppliers is not unusual for many repair jobs.

A typical repair shop, even the smallest, will handle five or more cars a day. If each of the five jobs required only four calls, a shop will have 20 outgoing calls a day strictly to perform its service. At five days a week, a shop will be required to make 100 or more calls a week.

It should be clear, then, that the frequent phone use is unavoidable in the conduct of an automotive repair service. Any proposal to charge for the number of calls, therefore, will have an impact on this type of business.

LENGTH AS A COST FACTOR

There is an implication in the PNB information explaining local measured service that phone users have some control over the length of calls. This may be true for most non-business calls, but it is not true for the auto repair business.

As explained, the less time spent on the phone, the better. The reality is we not only have to make many calls, but we have to control over their duration. For example, a call to a warehouse distributor, a principal source of parts, invariably involves a period of being put on hold. Incoming calls normally are placed on hold until an inside salesperson can take an order. This is followed by a second holding period while the salesperson looks up the part or parts for availability and cost. If the part or parts sought are not in stock, one can hang up or stay on the line longer to place a back order. Sometimes there is a wait while the salesperson places a call to a second source to locate a needed part. If the stock is available, there is a period required while the order is written up.

Depending on the size of the order and time availability of sales personnel, this transaction can take a minute or up to a half an hour. Of course, once put on hold, you could hang up and make repeated calls until you got right through to a salesperson, but this saves neither time or money. Under measured service, repeat calls end up costing money no matter the length, and once a call was completed, the duration factor would still be there.

Why not make a call, immediately place an order, then have the supplier call back? This sounds plausible, but the fact is, while suppliers do call back with information, the typical warehouse distributor's order desk is organized for incoming calls; is working to capacity under the present system; and adding additional personnel cannot be economically justified.

Another instance when the automotive repair shop operator has no control over the duration of calls is when talking to customers. Customers want and deserve full information regarding the necessity for repairs on their cars. They need to know what a job will cost and what time it will take. Few customers today, faced with a major repair job, which can cost in the thousands of dollars, will give authorization without first hearing a full explanation. From the mechanic's viewpoint, it would be best to make this explanation face to face because of the difficulty in explaining technical work to non-technical persons over the phone. A typical customer, however, requests to be contacted by phone during working hours.

During this phone contact, all, or the better part, of the information required to conclude a transaction must be communicated. These customer calls vary in length, depending on the nature of the work, and cannot be shortened.

LACK OF JUSTIFICATION

Up to this point, I have tried to show how the telephone is nearly as much a required tool of the automotive parts and repair industry as our mechanical instruments. With the existing flat rate system, the telephone enables us to perform our services expediently and economically. The negative impact of local measured service is equally clear: Nearly all automotive repair shop and parts suppliers business calls are local. Calls are made during normal business hours. Call lengths vary, but are sufficiently long that charges based on time will add to overall phone use costs. There is no practical way to avoid most calls, neither can the rate increases accompanying local measured service be passed along to our customers.

We believe these points are sufficient to prove the inescapable economic impact local measured service will have. It also is out assertion that the proposal is unfairly made.

PNB calls its local measured service proposal "a new pricing policy," and justifies it as the "result of the changing telecommunications environment." The same literature explains the PNB customers will now be paying for what they use. Throughout their information there is a strong implication that this new policy is being forced on the company, with a second implication that the existing flat rate system, under which profits have been made, is no longer sufficient to meet costs.

The fact is, in most companies, certainly in my own business, this new way of measuring costs will result in additional revenue for PNB. PNB produced audits are the best evidence of this. In pursuing this point with a company representative, it was admitted that additional revenue will be produced by local measured service. The question arises, is this pricing policy in the interest o equity, or is it a back door way to raise revenue?

In the matter of cost projection audits, the company is quick to offer a series of comparison costs, but nowhere is there an explanation of why measured service is necessary or justifiable. The cost projection audits are like being fitted for an unwanted straight jacket.

Finally, we argue that PNB's quest for equity in pricing is specious on its face so long as residential customers are excluded from mandatory local measured service. To exclude residential users is to overlook the fact that the vast majority of business calls are not discretionary, while calls placed from residences are nearly always discretionary. Thus local measured service retains the subsidy feature of flat rate service which PNB claims is unfair.

This discrimination against business is further highlighted by a PNB created illusion that the business customer may well end up saving money under measured service. The company claims to offer three options for the business customer. In an informal poll taken among our membership, not one fits into any option but the Standard Allowance Option. We, therefore, question the truth in the assertion that there are options to mitigate phone service costs.

As business men and women, the members of the automotive trades recognize the need to cover costs and to make a return on investment. Further, we recognize that the coming deregulation of the nation's telecommunications systems leaves many uncertainties. We fail to find in any PNB explanations the justification that rate increases, under whatever title, are an inevitable result of deregulation. We do not find any evidence that PNB has made its case for local measured service on the basis of practicality.

When Pacific Northwest Bell can provide factual answers to these questions, then the 450 small businesses I represent will be ready to listen. Until then, we urge the Oregon Public Utility Commissioner to reject this thinly disguised rate increase.

Since the time of my previous testimony, I would like to emphasize several new points that have come up.

The State of Oregon has announced that it is setting up its own microwave system that will allow it to pull from the system where they now pay $1,000,000 a month in phone charges. Even though the costs are high, they feel they can pay back the cost of the system in four years. Ken Bradley, local business announcer on the "Nightly Business Report" on Channel 10 says, "Guess who's going to pay the bill, small business."

Also, I would like to note that Dwyer Community Hospital, an 83-bed community hospital of which I am Chairman of the Board, has had their phone system monitored, and even though the hospital has its own phone system, the increase because of measured service has been over 50%.

TESTIMONY OF JOSEPH M. BERNARD, JR. OWNER, J.M. BERNARD'S GARAGE & SERVICE STATION; PRESIDENT, DWYER COMMUNITY HOSPITAL BOARD; PRESIDENT, PORTLAND AUTOMOTIVE TRADES ASSOCIATION, INC.; AND PAST STATE PRESIDENT, AUTOMOTIVE SERVICE COUNCILS

Mr. **Bernard**. Thank you, Congressman Wyden.

I would like to kind of address a different problem. Everyone has been talking about access service.

Last summer I was approached by someone from the telephone company who said that we would like to survey your telephone usage to determine what your costs would be under measured service, and I didn't understand what measured service was all about, so I said fine.

I'm a small businessman and I don't understand all the complications of the breakup of AT&T and what has happened, so they did a survey on my telephone and found out that my telephone rates under measured service would increase 118 percent on the average. That was a 3-month study.

I began to become very concerned and decided that I should look into it and see if other people had the same problem. Well, I addressed a couple of groups of automotive people who run small businesses like mine, and you must realize I only have two lines. I run an automotive repair shop my father started 59 years ago, and I run it, and believe me, there are no excess profits and if the gentleman from the FCC feels that I can pass on those costs to my customers, I don't know.

Anyway, I filed as an intervenor at the public utilities commissioner hearing at Salem, OR. The public utility commissioner in Oregon is a one-man show. He has a staff but he makes those decisions, and just before he left office he OK'd mandatory metered service for all business customers in the State of Oregon, which means that I would have 118-percent increase.

Some of the people who appeared, their telephone rates would increase from $300 a month to $3,000 a month. A man selling carpet cleaning, of all things—a small, very small, business operation. One of the school districts presented information that showed a rate increase of $2,500 a month for the Springfield School District, as I recall.

So I became very interested and some of the people from the phone company said, well, where were you when the breakup came?

Well, I didn't understand that the breakup meant to shift the costs from General Motors and the big business people to J.M. Bernard's Garage in Milwaukie, OR.

This really bothered me because this gentleman today again pointed out that they would have a further decrease in long distance rates, and in my business I probably have maybe two or three interstate long distance calls made a month, so I don't use the long-distance system and here my rate is increasing 118 percent and theirs is going down 30 to 40 percent and believe me they can afford it a lot better than I can.

Anyway, in Oregon, our public utilities commissioner was very generous, too, and added a $6 line charge access fee—I believe Congressman Wyden recognizes that—and it's strange that these costs and this technology have not been cost effective because I happen to have an awful lot of friends who are being laid off at the telephone company or asked to take early retirement after 25 years of service, so they are certainly cutting down on their work force.

There was a study made by Dr. Selwyn, who is an expert on telephone rates, and he also agrees that measured service is not a fair means of charging small business customers for the use of telephone services.

Mr. WYDEN. With unanimous consent, we'll make that a part of our record.

Mr. BERNARD. I'm also chairman of a hospital board. We have an 83-bed community hospital. I have some of their rates. I just got them.

We have our phone system which we bought and paid for and we find out that our telephone rate one month would go up 46 percent and the next month they tested and it was 48 percent, and I know Congressman Wyden is very active in the health care field and has introduced some bills to cut back on doctors' fees and they're asking us to cut the costs of hospitals, and this is certainly not going to help us cut the cost of hospitals, to increase our rates 46 percent.

The State of Oregon last week announced on the nightly business report, our local editor of that, Mr. Ken Bradley, announced that the State of Oregon was going to put in a microwave system and they were going to withdraw—and I assume this is what you're talking about when you're talking about bypass—the State of Oregon said that we can build our own microwave system and pay for it in 4 years because of the savings made on our $1 million a month telephone rate bill.

And, Mr. Bradley said, guess who is going to pay the bill, and I'm sure that I'm one of those that are going to pay that bill, because as he pointed out the return on revenues or the returns and dividends that the stockholders of Pacific Northeast Bell are guaranteed to be a certain amount and I'm sure that those costs are going to be put right back to me, and if the 6.1 percent increase is going to cost me 118 percent increase in my rates, I'm questioning what the other 25 or 30 percent decrease in long distance rates are going to do to me.

I think it's a very serious problem and if people think that profits are great in small business, please believe me, they are not.

We have had a very difficult struggle, even though after 59 years in business in Oregon, the lumber industry is very bad and we've had a very difficult time.

That's my testimony.

Mr. WYDEN. Joe, thank you very much for an excellent presentation. I know we'll have a number of questions.

Our next witness, Mr. Motley of the National Federation of Independent Business, I want to thank you, Mr. Motley, for the assistance that you and NFIB have given the task force, the fact that you have conducted a study and you have just poured hours into this issue represents a tremendous commitment that you and your organization has made to the small businesses. I just want to thank you for all the help that you've given the task force. We very much look forward to working with you in the days ahead.

[Mr. Motley's prepared statement follows:]

Prepared Statement of John J. Motley III, Director of Federal Legislation, National Federation of Independent Business

Mr. Chairman, the National Federation of Independent Business (NFIB), representing over a half million small and independent business members, appreciates the opportunity to testify before this task force on the effect on small business of the FCC's access charge plan and restructuring of the telecommunications industry.

In the spring of 1983, NFIB undertook a study entitled Small Business Problems and Priorities in order to reaffirm and, in some cases modify, existing organizational priorities, which are supposed to reflect small business priorities. Respondents to the survey on which the study was based were asked to rate the severity of seventy-two possible small business problems. The resulting prioritized list of problems is included as an attachment to my statement. Most of the issues were ranked basically according to

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our expectations, and "interest rates" was ranked number one. It was somewhat of a surprise, however, to find "telephone costs" ranked fourth on the list of seventy-two. Hence, NFIB staffers were introduced to the world of telecommunications deregulation and access charges.

In order to gain a more in-depth perspective of the problem as quickly as possible, we conducted a survey on telephone usage among over 17,000 of our members during our annual membership renewal in early 1984. Results from this survey were available in May, just before access charges were scheduled to go into effect for multi-line users. This preliminary profile on telephone usage by small business was our first indication that the restructuring of the telecommunications industry as ordered by the FCC and, specifically, the access charge plan were going to severely impact small business. The overall indication is that small business will bear the brunt of the costs of deregulation while large business and residential customers enjoy discounted rates.

The FCC has repeatedly stated the goals of the access charge plan: (1) elimination of unreasonable discrimination and undue preferences among rates for interstate services; (2) efficient use of the local network ; (3) prevention of uneconomic bypass; and (4) preservation of universal service.[1] Originally access charges were to be levied on all telephone lines, but upon reconsideration, the FCC deferred the imposition of access charges on residential and one-line business users until June 1, 1985. During the deferral period, the FCC planned to "conduct supplemental proceedings to devise an exemption for persons who cannot afford to pay any end user charge" and to "reevaluate the transition plan for end user charges."[2]

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[1] Federal Register Vol. 49, No. 43, Friday, March 2, 1984, p. 7810

Why did the FCC exempt one-line business users as well as residential users?

NFIB submits that there are two misperceptions upon which this exemption was based: (1) small business is granted significant relief by the exemption of one-line business users from access charges; and (2) the costs of access charges to multi-line small businesses, which are not exempt, is being offset by reduced long distance rates.

The NFIB survey found that most small businesses are multi-line users. Over 60% of the respondents indicated that they had more than one telephone line. Consequently, the gradual transition that the FCC has devised for residential and one-line business users as a means of protecting those customers least able to adjust to rapid cost increases is ineffective with regard to most small businesses.

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[2] Federal Register Vol. 49, No. 43, Friday, March 2, 1984, p. 7811

In a study released this month by the Congressional Budget Office (CBO), the perception that small business has been relieved from access charges is illustrated by repeated references to "residential and small business subscribers" instead of "residential and one-line subscribers."[3]

The second misperception, that business users as a whole use long distance (interstate) service to such an extent that the reduction in interstate rates will offset the cost of access charges, is also refuted by our survey. This may be true for large businesses, but it is simply not true for small businesses. Nearly two-thirds of the respondents indicated that less than half of their phone bills were long distance charges, and furthermore, over half of their long distance calls were intrastate, i.e., not affected by reduced interstate rates.

The impact of the access charge plan on small business was never properly studied during the plan's formulation, and now that the facts are available, NFIB is urging the FCC to reconsider the plan.

On June 6, 1984, NFIB filed a petition with the FCC for further reconsideration of access charges. During such reconsideration, small business should be accorded the same treatment accorded residential and one-line business users, that is, access charges should be suspended.

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[3] The Changing Telephone Industry: Access Charges, Universal Service, and Local Rates, Congressional Budget Office, June, 1984.

It is important to keep in mind that interstate access charges are only one part of the increasing cost of telephone service. Intrastate access charges for in-state long distance service are another new cost component. New charges have been implemented for long distance information calls. Installation fees have skyrocketed --a 400% increase in the last 30 months--according to Dr. Michael J. Stoil, consultant with Coba Associates.

Dr. Stoil's study of the telephone industry and small business includes a special review of "yellow pages" advertising, which he names "the single most important advertising medium for the small retailer." Not only have single service area yellow pages been replaced with multiple yellow pages for subareas within each individual area, but rates per advertisement have increased by 100-200% during the last four years. In other words, the small business owner must pay more for advertisement and, in some cases, must pay more than once to advertise throughout the same area formerly covered by one set of yellow pages.

Once again small business is being saddled with the brunt of the costs. Just like utility rates, phone rates are being discounted for residential and big business customers at the expense of small business. Rate increases being requested by local telephone companies are hitting small business full force, and the improved services cited by the companies to justify their requests often are of no benefit to small business or are not even directly related to current costs of providing phone service. Dr. Stoil points out that long-term infrastructure costs are in some cases being included in rate increase calculations.

The impact of the access charge plan has not yet been felt by small businesses because phone bills reflecting the new charges are just now in the mail. The response of NFIB members to an Action Alert newsletter from our Washington office was, however, overwhelming. In fact, in the history of NFIB, the mail generated in response to that newsletter describing the access charge decision was surpassed only by the response in 1981 to an Action Alert concerning tax reductions. I am certain that the field hearings to be conducted by the Task Force will elicit a strongly vocal response to this new charge on small business. Again, NFIB appreciates having this opportunity to testify at the first of these hearings. Thank you.

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Attachment

TESTIMONY OF JOHN J. MOTLEY, DIRECTOR OF FEDERAL LEGISLATION, NATIONAL FEDERATION OF INDEPENDENT BUSINESSES

Mr. MOTLEY. Thank you very much, Mr. Chairman.

I do want to commend you and the other members of the committee for holding these hearings and thank you for the opportunity to testify on behalf of NFIB's 570,000 members across this country.

I don't think that there is any more important pocketbook issue before this Congress today for small business people than telephone access charges and what is going to happen with the telecommunications system of this country in the years ahead.

I have a short statement which I would like to submit and summarize. I also have the results of the survey that we conducted in March of 17,000 NFIB members, which I would like to submit.

Mr. WYDEN. With unanimous consent we will put both of those in the record in full.

Mr. MOTLEY. And I have copies of the petition that we filed before the FCC on June 6 for reconsideration of this decision, and also the study which our concerns were based upon, our priorities and problems study from June of last year which I would like to submit for the committee's consideration.

Mr. WYDEN. With unanimous consent, we will submit all your materials for the record.

Mr. MOTLEY. Thank you, Mr. Chairman.

I'm not too sure that I really need to go on and testify after listening to Mr. Fowler's comments here today. He seemed to make my case for me very, very well.

Let me paraphrase what I think he said: In order to preserve universal service we're making small business to pay to ensure that big business doesn't bypass the system.

He said it once. He said it twice. I believe he said it three times. That's the whole reason why we are concerned about the current system, that small business, like in other utility pricing in this country, is being asked to pick up a larger and larger share so that we can subsidize residences on one side, because they are a politically potent group of people, and then we cannot impede big business for whatever other reasons on the other side, be it technological innovation, the need to have jobs in the Frost Belt industries, whatever it might be, we certainly don't want to impede them in any way.

The Chairman also made a second comment which I found very, very good and useful as far as my argument is concerned, and that is that small businesses can't opt out of the system, there is no elasticity in the small business market.

He cites the Perl study on elasticity of demand. Well, for small businesses phones are not a luxury. They are part of doing business. You don't have one line or two lines or three lines because you want to communicate with your family. You have them because you want to take orders, you want to take reservations if you own a restaurant, you want to make sure that people get their hair done or whatever else it might be.

A decrease in the number of phones you have generally will mean a decrease in the amount of business that you do and from Congress' standpoint I would think that you would be concerned about a decrease in the number of jobs in the small business sector.

As far as elasticity of demand is concerned, the NFIB survey did shed a little bit of light on that and let me comment here that we would be willing to run some different tabulations for you to see if we could add some more, and also possibly to go out again with another survey to a scientifically selected sample of the NFIB membership to see if we can provide more information for the committee. We did ask the members who responded to this survey at what point they would begin to reduce telephone service and we asked it in terms of dollars. Of the members, 38.6 percent said that if their telephone bill were to go up $100 a month they would begin to reduce service and 60.2 percent said that if it went up between $100 and $250 a month that they would begin to reduce service, so there is certainly some problem in the small business area from this standpoint.

Let me admit up front to the committee that NFIB, like the small businessman to my right, was late in getting into this particular issue because we did not perceive telephone service to be a problem for small business.

Well, back last year, in the spring of 1983, we went out and we decided to take a look at our own priorities internally and ask our membership what their problems were.

We gave them 72 areas to pick from and telephone rates came out No. 4, behind only interest rates, which were extremely high in the spring of 1982, liability insurance, the cost of liability insurance, and the cost of natural gas, gasoline and fuel oil. Telephone rates ranked No. 4. All of a sudden it became a bigger problem for us.

In the fall of last year when the FCC's decision became obvious for $6 access charges for interstate access to the loop, NFIB did a mailing to its membership explaining what we saw coming and what they would be faced with.

We were deluged with mail. A lot of that mail also came in to Congress and Congressman Wyden and Congressman Craig sent a letter up to the FCC with almost 200 signatures on it.

In June we filed the petition and I would say that you are beginning to see just the tip of the iceberg because the first telephone bills with access charges on them are just now being mailed to customers across the country.

Let me address just for a second, if I can, Mr. Chairman, the FCC's arguments.

From our standpoint they are based upon two misconceptions. No. 1, that significant relief was granted to small businesses when one-line small businesses were exempt from access charges until June 1 of next year; No. 2, that access charges will be offset by reductions in long distance telephone lines.

Sixty percent, or more than 60 percent, of the respondents to the NFIB survey had more than one telephone line and 95 percent had less than six, so small business generally is clustered between one and six lines.

In addition to that, a recent CBO study continually cites the fact that small business has been given relief and, in fact, if you take a look at the figures we just cited, small business has not been given relief so that's a misconception that an awful lot of people are laboring under in this town.

In addition to that, there is the misconception that these charges are going to be offset by interstate rates.

If I can, Mr. Chairman, I would like to read just for a second, the part of the petition which you referred to this morning, for the members, indicating that there is really no offset:

> The Commission continues to defend its determination to impose substantial access charges on multiline business subscribers with the assertion that business users are also generally the largest long distance users so lower long distance rates should be of greatest offsetting benefit to them.

This statement is flatly wrong as it relates to small business users. A large population of the NFIB survey respondents indicate that 24 percent or less of their monthly telephone bill covers long distance. Almost half, 45 percent, of the surveyed members reported that 75 percent or more of their long distance costs were for intrastate calls, and those charges are not going down.

If one looks at an illustrative two- to three-line subscriber who devotes less than 25 percent of his normal monthly bill to long distance service, the total monthly bill will fall between $200 and $500 per month.

Even assuming a bill at the top of this range, the long distance component would be $125. The interstate long distance charge would be no more than $31.25 for those who indicated that 75 percent or more of their long distance charges are not for intrastate service.

Such a subscriber, a very typical small business concern, may pay $12 to $18 per month in access charges to achieve a long distance rate saving of $1.90 per month.

The offsetting benefit found by the Commission does not exist at a meaningful level for the small business community.

I think the thing that bothers us most about all of this is that what we're discussing here, what everybody is so upset about is only a part of the picture and it's only the beginning of a part of the picture.

We are talking about interstate access charges. The public utility commissions are free to level also intrastate access charges, and the operating companies have been going to the public utility commissions at a rather regular rate since divestiture asking for rate increases to cover their operating costs.

In addition to that, I think the committee will probably uncover the fact that an awful lot of other charges are going up—specialty services, yellow pages advertising and a whole host of other things and these increases are only for the next couple of years.

We heard the chairman say here this morning that rates are going to be going up 100 percent over the next couple of years.

If this problem is the fourth most important problem to the group of businesses that we surveyed last year——

Mr. **Wyden**. Excuse me for interrupting. It was the second most important issue in Oregon.

Mr. **Motley**. Second most in Oregon, yes, it is, Mr. Chairman.

I guess what we see, too, which also disturbs us very much is that we see a similar shift in pricing or costing of telephone services taking place here as we do for other utility services across the country.

Small business is being asked to pick up more than its fair share of the cost of telephone service. Again residences are being subsidized. Large businesses are not being asked to pay what it costs for them to have service.

The last point I would like to make, Mr. Chairman, is that we see no reason why the small business community should be asked to pay 12 months of access charges while one-line businesses and residences are let off the hook.

We think that the least the committee can do is to suggest to the Congress equal treatment and that a moratorium be placed on all access charges until everybody is brought under it.

Thank you very much, Mr. Chairman.

Mr. WYDEN. We will have some questions. We're at one of those frustrating periods where we have to leave the hearing to vote.

Mr. Weber has a quick question because he will not be able to come back. After that we'll break for this vote and finish our witnesses and then we'll have questions for each one of you.

Mr. WEBER. Thank you, Mr. Chairman.

Mr. Motley, what I really think I'm going to ask you is to supply us with some more information. The survey that you reported on tells us a lot that we didn't know before, a little bit about telephone use by small business.

I'm interested that the final question in the survey says that well over a third of the users will cut back on telephone use if their costs increase by less than $100 a month, and almost two-thirds, if you divide the replies out, if costs increased by $100 to $250 a month.

Do you have, or could you generate for us additional data that would give some indication of what the impact of that reduced telephone service would be on the business' profitability?

Mr. MOTLEY. I don't believe that we could generate it from the data of the survey.

Mr. WEBER. Would NFIB be willing or able to try and get us that data?

Mr. MOTLEY. We certainly are both willing and able to try and get that data.

Mr. WEBER. I think that would be helpful in developing the case.

Mr. WYDEN. I think it would be extremely helpful. We'll work with you. We will be back here in about 10 or 15 minutes.

[A short recess was taken.]

Mr. WYDEN. The task force will come to order.

Our next witness will be Mr. Russell B. Spencer, who is accompanied by Mr. Thomas Gantert.

Gentlemen, we'll make a full copy of your written remarks part of the record and if you could just summarize and highlight some of your chief concerns I think that would be helpful.

[Mr. Gantert and Mr. Spencer's joint prepared statement follows:]

JOINT PREPARED STATEMENT OF THOMAS S. GANTERT, CONSULTANT TO MUZAK FRANCHISEES, AND RUSSELL L. SPENCER, JR., PRESIDENT, INDEPENDENCE COMMUNICATIONS, INC.

Good morning. We are Thomas S. Gantert */ and Russell Spencer, Jr. **/ We are here as representatives of the nearly 200 franchised affiliates of the MUZAK audio program service. Through this network of affiliates MUZAK services are provided to more than 130,000 subscribers across the nation, and are listened to by millions every day.

We are pleased to have the opportunity to appear before you today to discuss the effects of the divestiture of AT&T, and particularly the creation of new special access charges, on small businesses such as Muzak affiliates. This Committee already is well aware of the many issues surrounding the Federal Communications Commission's recent creation of a six dollar per month interstate access charge on switched voice telephone lines. However, the Committee may be less familiar with the attempts by local telephone companies to impose huge and unjustified "Special Access" charges on private lines. Yet for many companies, particularly small businesses such as Muzak affiliates, these charges would be devastating.

Last October, AT&T and the Bell Operating Companies filed new private line tariffs, nominally as part of the divestiture process. But these changes, submitted in a series of highly complex and unduly voluminous filings, go well beyond those required to facilitate divestiture. The new tariffs propose a complete restructuring of service offerings and drastic increases in service rates, much to the detriment of all users, particularly small businesses such as those run by the Muzak affiliates. These increases can in no way be considered just and reasonable as required by the Communications Act. Nor are they in any way related to the telephone companies' actual costs, for there has been no change in private line service itself.

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*/ Consultant to Muzak franchisees throughout the United States. Has been in the Muzak business since 1946 serving in a variety of capacities including technical, sales, management and ownership.

**/ President of Independence Communications, Inc. in Norristown, Pa. Independence Communications holds Muzak franchises in Philadelphia, Harrisburg, and Pittsburgh, Pennsylvania and Norfolk, Va.

These rate increases would have a devastating effect on Muzak affiliates, and could drive some affiliates out of business altogether.

As a preface, we should explain how Muzak operators distribute the music service to subscribers. MUZAK music programming is created by Muzak, a unit of Westinghouse Broadcasting and Cable, Inc. ("Group W"). Muzak then transmits the service to its network of affiliates by satellite. Most of these affiliates are small, independently owned businesses who operate in specific communities. The affiliates receive the service at their earth station/studio facilities and then arrange to transmit the service from that point to individual subscribers in their area. Originally, Muzak affiliates were entirely dependent on telephone lines to distribute the program service. Recently some affiliates have been able to substitute FM radio subcarrier channels ("SCAs") for this purpose. But in many cases SCAs are either not available or cannot be used to provide service to many MUZAK music subscribers; in these cases affiliates are forced to use expensive leased telephone lines for local transmission service. Approximately 95% of the affiliates use telephone lines to reach at least some of their subscribers, and 40% use such lines to reach 35-50% of their subscribers.

Telephone company charges for local transmission already represent a substantial operating expense for Muzak affiliates, and therefore significantly affect the rates the affiliates must charge their subscribers. The rate structures proposed by the telephone companies in their new "Special Access" tariffs would affect those rates even more dramatically. These tariffs, which would replace current offerings, effectively would result in exorbitant increases in facilities rates for Muzak affiliates. Monthly charges for local audio program transmission would increase 500 to over 1000 per cent, depending on the particular telephone company involved.

Many of the Muzak affiliates would be severely injured if the FCC permits these tariffs to go into effect. Most Muzak affiliates have no effective alternative to the telephone channels they now use. They would be forced either to abandon service to subscribers served by telephone lines, or increase charges so substantially that many such subscribers would simply discontinue the MUZAK program service. In either event, virtually all Muzak affiliates would lose significant numbers of customers, and the 40% of the affiliates now using telephone channels to reach over a third to a half of their customers might be forced out of business altogether.

Originally, the local telephone companies filed their new interstate "Special Access" tariffs at the FCC last October at the same time that they filed the switched access tariffs with which the Committee already is familiar. Similar intrastate "Special Access" tariffs were filed with most state public utility commissions. These tariffs were scheduled to become effective on January 1, 1984, coincident with divestiture. It is important to stress that the "Special Access" tariffs were not mandated by the FCC's access charge rules promulgated in Docket No. 78-72, nor were they necessitated by divestiture. Nevertheless, the telephone companies chose this time of uncertainty in the industry to restructure their private line access tariffs completely, replacing the simple tariff long in place with a new rate structure so complex as to be virtually incomprehensible. Simultaneously, AT&T filed new interexchange tariffs for the same services that similarly restructured private line distribution services in a novel and complex fashion, with dramatic rate increases.

Together, the new telephone company tariffs would have forced mammoth rate increases on private line services users, including Muzak affiliates. When one read between the lines of the support materials filed with the new tariffs, it became clear that the tariff changes had no cost or other lawful rationale. Rather, when all was said and done, the telephone companies simply were attempting to dramatically increase charges to those captive ratepayers who had no meaningful alternative to local telephone lines. And the telephone companies had chosen to try to slide these rate increases into effect when the opportunities for customer and regulatory review were the smallest.

Fortunately, thus far at least the FCC has refused to approve these unconscionable increases. Shortly after the tariffs were filed the FCC suspended them to permit further review. Then in February the Commission rejected the local telephone company "Special Access" tariffs, finding that the tariff rates were unjustified, and "that the proposed 'Special Access' rate structure [was] unreasonable, discriminatory, and violative of Commission decisions and policies." The FCC ordered the telephone companies to refile lawful tariffs within a month.

However, when the telephone companies submitted their new "Special Access" tariffs, Muzak affiliates found that the monthly charges were even higher than those proposed last Fall, resulting in increases of over 1000 per cent in some cases. And the new rate structure, while curing some defects, created new and unlawful discrimination, particularly against small businesses such as the Muzak affiliates that use multipoint service. Once again the FCC was forced to suspend the tariffs and engage in further review. That review is now pending, though we understand that some Commission action is expected later this week.

The magnitude of the rate increases can be seen in the chart below. Currently Muzak affiliates pay $39.30 per month for the channel between their satellite earth station and the telephone company serving wire center, and $8.25 per month for the channel from the wire center to each subscriber. Yet under the proposed "Special Access" tariffs these rates would increase enormously.

Telephone Company	Proposed Channel Charge (assuming 0-8 mileage band)	Increase Over Current Studio-Distributing Center Channel Rate ($39.30)	Increase Over Current Distributing Center-Subscriber Channel Rate ($8.25)
Illinois Bell	$916.28	2231%	10,106%
Ohio Bell	381.70	871%	4626%
Pacific Northwest (Washington)	254.07	546%	2979%
Exchange Carrier Association (Other Telephone Companies)	152.80	288%	1752%
Pacific Northwest (Oregon)	113.84	190%	1279%
Pacific Northwest (Idaho)	110.73	182%	1242%
Wisconsin Bell	94.48	140%	1045%
C&P (West Virginia)	82.67	110%	902%
Bell of Pennsylvania	73.49	87%	790%
C&P (Maryland)	71.34	81%	764%
C&P (DC)	69.54	76%	742%
C&P (Virginia)	63.42	61%	668%
Michigan Bell	59.00	50%	615%
New Jersey Bell	54.36	38%	558%
Pacific Telephone	53.64	36%	550%

There is simply no possible justification for rate increases of this magnitude. As the table indicates, under the Exchange Carrier Association ("ECA") tariff Muzak affiliates would be forced to pay nearly four times more than they do today for channels from their studio to the telephone company wire center, and over eighteen times more for channels from the wire center to each subscriber premises. These rate increases would be even higher if any of the channels are over eight miles in length. Some telephone companies would charge less than the ECA, while others would charge significantly more. But in each case the new rates would be far above current levels.

AT&T's new private line tariffs also completely restructure current service offerings and dramatically increase rates. The exact level of those increases is somewhat in doubt, both because of the ambiguity and complexity of the AT&T tariff itself, and because AT&T's rates purport to rest heavily on the local telephone company rates discussed above. But in any event, it is clear that AT&T has perceived this time of radical change in the telephone industry as an opportunity to increase charges substantially to captive ratepayers such as the Muzak affiliates.

CONCLUSION

The FCC is still considering the private line tariff proposals of the local telephone companies and AT&T, and Muzak affiliates hope that the Commission will reject these tariffs as filed. However, given the persistence the telephone companies have demonstrated in attempting to impose these extraordinary rate increases, it is clear that Congressional oversight of this matter is also required. While we recognize the interest of this Committee in the switched access tariffs proposed by the telephone companies, we urge the Committee to focus as well on the potential harm to small businesses threatened by the private line tariffs. While the modest switched access charges approved by the FCC may have a significant impact on some companies, the private line rate increases we have discussed may actually force other small concerns out of business altogether.

TESTIMONY OF THOMAS S. GANTERT, CONSULTANT TO MUZAK FRANCHISEES, ACCOMPANIED BY RUSSELL L. SPENCER, JR., PRESIDENT, INDEPENDENCE COMMUNICATIONS, INC.

Mr. Gantert. Thank you very much. I'm going to step out of line a little bit in that I'm Tom Gantert and this is Russ Spencer. We're going to switch the two people.

Mr. Chairman, and members of the committee, I'm a consultant for a number of Muzak affiliates throughout the country. Russ Spencer is from Philadelphia and he holds Muzak franchises for the areas in Pennsylvania and in Virginia.

We are appearing on behalf of nearly 200 small businesses that distribute the Muzak program service to over 130,000 subscribers throughout our country.

I would like to thank the committee for giving us an opportunity to discuss the effects of the AT&T divestiture on small businesses, such as alarm companies, answering services, independent music operators and Muzak operators.

I'm not talking about the $6 access charge that has been talked about here today, but I am talking about another portion of that same tariff which is called special access charges and it covers the private line service. I am basically interested in the private line service.

Since October of last year Muzak and its franchised affiliates, because we are an organized group, have been actively participating in proceedings before the Federal Communications Commission, attempting to ensure the AT&T divestiture is not used as a tool for implementation or unjustified increases in the private line area.

As part of the AT&T divestiture, AT&T and its Bell operating companies filed for radical increases in their existing tariffs for private line services. The new tariffs were proposed in a series of very voluminous and virtually incomprehensible filings and contemplated a complete restructuring of the service offerings and drastic increases in service rates, much to the detriment of private line users such as Muzak affiliates.

Let me explain why and how the Muzak affiliates would be so negatively affected by the proposed tariffs. Muzak affiliates depend heavily upon the availability of leased telephone lines for local distribution of Muzak program service.

The service is transmitted to the affiliate studios by satellite and distributed from the studio by FM subcarrier channels and telephone lines. Approximately 95 percent of the affiliates use telephone to reach at least some of their subscribers and 40 percent use such lines to reach 35 to 45 percent of their subscribers.

Under the present tariff structure, the telephone company charges represent a significant operating expense for Muzak affiliates and substantially affect our rates.

Currently the rates for distribution of Muzak service are at $8.25 per subscriber and that is for a line only and does not include any central switching office equipment and they have a $39.30 rate for the line from the studio to the telephone central serving office.

Under the proposed tariffs these rates would increase between 500 and a 1,000 percent. These rates are in no way related to the telephone company costs. They are exhorbitant and unjustified by any measure and are clearly in violation of the Communciations Act of 1934. We are currently fighting a significant battle at the FCC in an attempt to prove those points.

We would like you to give an overview of what the increased charges would mean in dollars and cents to some of our Muzak affiliates, and at this point I would like Russ to bring up, because he is a franchiser, some of the areas that he can talk about.

Mr. SPENCER. We serve approximately 6,000 accounts in Pennsylvania, New Jersey, Delaware, and Virginia, and of this number 600 are telephone line accounts, so we're talking about 10 percent of our accounts are telephone lines, so we pay more than $80,000 per year in private line charges, just to give you a little perspective.

Now our average rate is $45 a month. The independent music companies and the smaller Muzak franchises have an average rate of $30 a month. The overall industry rate is approximately $1 a day. We are indeed small business. That's the reason we are here before you today.

In order to give you a perspective of the telephone line charges as they exist today in our business, I would like to quote two examples.

We are currently operating under the Pennsylvania PUC No. 1, section 12, intrastate tariff. We have drafted a letter, as yet unmailed, requesting that we be transferred to tariff FCC 260. The reason we haven't mailed it is we have heard the proposed rates, and you've heard from Mr. Gantert rates from $25, $40, $65 and the latest figure we heard was an increase of $80.

When I joined the Muzak division of WCAU in 1957, the telephone line charges were $1.25 a quarter mile. In 1973, 16 years later, we signed the Fulton Bank in Lancastershire, PA, and the phone line charge at that time was $1.50. Today that phone line charge is $13.

The line charges have gone up and up and we cannot pass the cost on to our subscribers. The music rate in that comparable period went from $30 a month to $35 a month.

When you're working with a $30 a month account, a $13 phone line charge is marginal and as that figure builds you run into a losing proposition.

I'll give one more example. We serve the Friendly Ice Cream in Shilington, PA According to the existing tariff the phone line charge there today is $48. The music rate is $25, so we start off $23 in the hole. Obviously we cancelled that account as a losing proposition in February of this year.

We got a call last week and they wanted to reinstate Muzak. Now what would you do? We will go out probably and reinstate Muzak only because we like the relationship with the Friendly Ice Cream Co. whom we serve in many, many locations throughout the East.

In Pittsburgh, we have a terrain problem. At a number of locations of the Pittsburgh National Bank the cost of the phone line today is greater than the music rate.

All of this is just to tell you under the present rate structure the phone line charges are encroaching more and more on the overall rate and makes our business in a precarious position.

The obvious point, and where we would like your over sight, we appreciate your time and would appreciate your over sight is in this tremendous increase which Mr. Gantert has talked about, the 500 to 1,000 percent.

What happens with you take a $30 account, which is the industry average, and you add $57 on top of that account, the difference between the $8 and the $65, you now have an $87 account which is untenable. Obviously the customer would not pay the triple rate.

Moreover, we have a contract, a 5-year agreement, which precludes us from increasing rates more than 10 percent in any 2-year period.

I just wanted to paint the picture for you because really, Congressmen, we're talking about a subject that could put a number of our associates out of business.

Smaller franchises in Fargo, ND., and in several cities in Texas—Abilene, Lubbock, and Wichita Falls—are 100 percent on phone line. The proposed increase to these franchises, and they are billing about $30 a month, is $152.80 for the cost for the phone line so automatically they're out of business.

In summary, we are certainly not opposed to reasonable rate increases in private line. We expect it. We accept it. We hope to increase our rates to justify that cost.

However, the increases proposed by AT&T and the BOCs this time are simply unconscionable and bear no relation to costs that will drive numerous small businesses out of operation.

There is no possible justification for rate increases of this magnitude, from 500 to 1,000 percent. This is documented on page 8 of our pamphlet.

We welcome the committee's oversight. We do not want to be subsidized. We do not want a free ride, only a fair ride. Thank you very much.

Mr. **Wyden**. Gentlemen, thank you all very much. I think your presentations were most helpful.

I have just a few questions and I know my colleagues do as well.

I think the first question to any of you gentlemen. You've been here most of the morning and I think you have heard the case for what the FCC is doing from Chairman Fowler and from others that the telecommunications industry, as the result of access charges and these other changes, would now be marked by competition at almost every level of telecommunications.

My question to you is what communications alternatives do small business persons have in this kind of new system, a small business person who has to be in contact with their customers on a daily basis. What kind of competitive alternatives do they have when there is only one supplier, a monopoly supplier, of telephone service at the local level.

I just don't see this competitive analogy really making much sense for the small businesses when there's a monopoly at the local level.

Maybe some of you could enlighten me about what competitive choices would be available to you, but I see very few.

Mr. **Bernard**. Under measured service, Congressman, there is only one line going by on the telephone post in front of my shop and they tell me that the breakup of AT&T was to start competition. Well, there's no competition when that one line goes by. I don't use the long distance system hardly at all, so there is absolutely no competition.

Mr. **Wyden**. How many phone lines do you have?

Mr. **Bernard**. In my shop I have two.

Mr. **Wyden**. Do you have any idea what your long distance bill is a month?

Mr. **Bernard**. As I say, I would probably average two or three long distance calls a month, out of State calls.

Mr. **Wyden**. So with access charges, it's $6 per line per month, you probably pay almost as much in access charges as you do in the actual long distance calls that you make.

Mr. **Bernard**. Probably more so.

Mr. **Wyden**. You pay more in access charges then in long distance?

Mr. **Bernard**. Yes.

Mr. **Wyden**. You pay more just for the privilege of having the opportunity to make the call.

Mr. **Bernard**. Yes. Under measured service, I think that the rates—I'm not sure I interpret all this—I think the first 3 minutes is 5 cents a minute for local calls, local calls to my parts warehouse to order parts or to call my customer and get his approval on an auto repair, and then after that it's 2 cents for each additional minute.

We're held up a lot of times in calling warehouses trying to obtain parts and calling our customers to get approval, which we try to do because there has been such a vast cry for approval of auto repairs.

Mr. **Wyden**. We'll come back to measured service in just a minute. I just wanted to get from some of you gentlemen your thoughts about whether this competitive kind of model that we've heard discussed really exists for the small business person when there's a monopoly on local service.

Would any of you like to comment on that?

Mr. **Spencer**. Well, Mr. Wyden, in our industry you are absolutely right, there is no option. The small franchises if they cannot stand the gaff of the rate increase have no place to go unless they can get an SCA and if they could they probably would use it to transmit the signal.

They have to accept this and go out of business because you can't charge $30 obviously, and be charged in return for phone line charges $152.80.

You are right on target. The fact that there is a monopoly and that is the proposed rate. If that became an actual rate, these small business people would obviously be out of business and there is no place else to go.

I appreciate your comment because it is so true, unfortunately.

Mr. **Wyden**. Mr. Gantert

Mr. **Gantert**. You're talking about businesses in Oregon, Washington, Iowa, whatever State you are representing you are talking about franchisers who are involved in that area.

The thing I would like to be sure that you understand is that, yes, we are involved like these gentlemen are in the $6 access charge in our business just the same as any other small business, but we're being hit with another load within that same tariff which is hidden in there called the private line tariff or the special access tariff.

In my case, I at one time owned a franchise in Memphis, TN, and in my particular case the cost for service to an individual subscriber under the new tariff goes from $8.25 per month to each subscriber to $152.80 per month to each individual subscriber.

There is no way to swallow it, hide it, sweep it under the rug. You're dead in the water. You're out of business.

The number of lines used in Memphis, and I happened to be doing some work there just last week, they are still using 600 telephone lines, which would mean their bill goes from approximately $6,000 per month for telephone service to serve the subscribers to $84,000 per month.

It's an absolutely unconscionable rate structure that they've come up with.

Mr. WYDEN. Mr. Motley.

Mr. MOTLEY. Two comments, Mr. Chairman. One is in listening to Chairman Fowler this morning, it really seems that he does not have a very good understanding of what small businesses are across this country.

So often here in Washington we tend to look at the trendy side of the small business picture, the high tech firms, the small firms that start out and they grow to have 10,000 employees in a short period of time, and obviously there are options available to those people.

If you go to Main Street there are very few options available. It's local service. It's dealing with your local telephone company. You don't have the time to explore options, much less the money to invest in those options. That's comment No. 1.

Comment No. 2 is that I really would like to echo this gentleman's comments on the fact that we're not really discussing access charges. That may be the reason that the committee was put together and it may be the reason we have a hue and cry right now, but the picture is much larger than that.

We have the private line problem that they have. We have the yellow pages. We have services. Long distance information is going up.

What you see, I'm afraid, is a massive shift in the cost of running this telephone communication system to Main Street and that is a problem because most of our jobs in this country come from Main Street.

Mr. WYDEN. I think that's a very thoughtful comment and that's what I tried to touch on in my opening statement as well, that we were going to have interstate access charges and intrastate and now we're seeing in some States mandatory measured service. It's a little bit like an onion. You just keep peeling it and you get to more and more layers and all of them spell higher costs for small business and basic telephone service, and the reason this committee was formulated was to look at the full gamut of these costs.

I think it's worth pointing out, and then I'm going to yield to my colleagues, that all of these are Government induced headaches for small business. Let's make no mistake how these came into being.

Mr. **Motley**. It's not the marketplace. It's the Government controlling the marketplace.

Mr. **Wyden**. Let me recognize the gentleman from Iowa, Mr. Bedell, and then my colleague from Florida.

Mr. **Bedell**. Thank you very much, Mr. Chairman. I was not here for most of the testimony so my time will be shorter than normal.

Mr. Motley, you indicated that you've done a study of some of your members in regard to telephone costs. We had testimony which said that if it could be shown that the actions of the FCC benefit big business at the expense of small business they would consider at least changing those regulations.

I take it your survey indicated that the increase in monthly costs as compared to long distance costs is a serious problem to small business users. Is that correct?

Mr. **Motley**. Yes, it did, Congressman Bedell. It is a fairly primitive survey and it was done primarily because this whole question mushroomed and nobody had any data on small business telephone usage.

We certainly need to probably follow that up with a much more sophisticated survey.

What it shows basically is that there is no offset for a small business for the increased telephone costs that they are experiencing now. They are not primary users of long distance, and if they do use long distance it's intrastate rather than interstate long distance.

Mr. **Bedell**. The reason I asked the question is that logic would certain seem to be that big businesses would use long distance to a much greater extent than the local retail merchant or the small business person would. Mr. Fowler did not agree with that statement, as near as I could interpret his testimony, but he did indicate that if it could be shown that this was discriminatory and that the benefits to big business were much more significant than the benefits to small business they would consider changing their policy.

I guess my question to you is whether there is a possibility that you could conduct a survey that would either show that Mr. Fowler is correct or that he is incorrect. If he is incorrect it seems to me that it would be important for us to ge such information and then challenge Mr. Fowler with the fact that he indicated that he would consider a change if it could be shown that his policies discriminates against small business.

Mr. **Motley**. We have indicated to the Chairman and to the ranking minority member that we would be delighted to participate with the committee in structuring such a survey.

Let me comment on your general statement of what Mr. Fowler said. I heard him at least three times while he was up here testifying say that the way that the Commission was trying to preserve universal service was to have small business pay so that big businesses wouldn't bypass it, and he said that in a number of different ways.

I interpret that to mean that he's indicating that the Commission is definitely trying to shift costs backward to those people who cannot afford to opt out of the system because their business depends on it.

I would urge you go to back and read his statement and see if what I heard was incorrect or correct, because I think he stated it very plainly at least three times.

Mr. **Bedell**. Thank you very much, Mr. Chairman.

Mr. **Wyden**. Mr. Bilirakis.

Mr. **Bilirakis**. Thank you, Mr. Chairman.

Mr. Motley, NFIB represents over a half a million small and individual business members, right?

Mr. **Motley**. Yes, sir.

Mr. **Bilirakis**. Would you say that that is the largest association of its type representing the small business community?

Mr. **Motley**. It's the largest organization representing business owners. I believe organizations like the realtors who have individual realtors have larger memberships.

Mr. **Bilirakis**. Realtors are not members of your organization?

Mr. **Motley**. Realtors are. We represent almost every type of business in the United States.

Mr. **Bilirakis**. Realtors would be members of their real estate organization as well as yours is what you're saying.

Mr. **Motley**. Yes.

Mr. **Bilirakis**. Sir, to what extent were you or your organization invited to participate in the hearings that took place by the FCC on this matter?

Mr. **Motley**. I do not recall and let me preface it by saying I have been the deputy director for Federal legislation for 4 years and that invitation probably would have come to me and I do not recall seeing an invitation for us to participate.

Mr. **Bilirakis**. So you're saying you didn't even participate to any extent, you weren't even invited to participate?

Mr. **Motley**. We weren't invited but that's probably unfair, Mr. Bilirakis, because we really didn't realize there was a problem out there until the spring of last year. It's only been about 15 months that we ourselves have been made aware that telephone costs were such a big problem for smaller firms, and if we weren't hearing it, I guess there were just an awful lot of other people out there who weren't aware of it, also.

Mr. **Bilirakis**. You weren't hearing that there was a potential problem there, and I know Mr. Fowler's not here and I missed his testimony and he may have covered this, but wouldn't we say that there maybe should have been some sort of a burden on them to have certainly weighed the potential impact on small business and invited you or your firm or your representatives to be involved?

Mr. **Motley**. Certainly, and we would agree with the comment made by Congressman Wyden before that there seems to us to be no attempt on the part of the Commission to weigh the impact of these changes on smaller firms.

As a matter of fact, the whole basis upon which they based their decision seems to us to be erroneous.

Mr. **Bilirakis**. We've run into this in an awful lot of our oversight hearings, too, haven't we, Senator?

Mr. Motley, I guess it's sort of done now, though, isn't it, from a realistic, practical standpoint? The breakup has taken place. The new loops have been, I guess, constructed. It is a past tense thing, isn't it? I mean it's not as we talked about the subway going back and forth, it really isn't really practical that Humpty-Dumpty can be put back together again, is it?

Mr. MOTLEY. You mean as far as the breakup and divestiture of AT&T?

Mr. BILIRAKIS. Yes.

Mr. MOTLEY. I would have to agree with you, Mr. Bilirakis. As far as the $6 fees on small businesses are concerned, I don't think we've given up the ghost on that one yet, at least not until the FCC acts to treat everybody in somewhat of an equitable manner.

Mr. WYDEN. Would the gentleman yield on that point?

Mr. BILIRAKIS. Sure.

Mr. WYDEN. I appreciate that because I think that we on the task force ought to be aware that any time that the U.S. Senate wanted to take up the the House-passed legislation, for example, and amend it to get rid of access charges and allocate the costs of running the telephone system fairly, they could do so.

There's no question that there are many, many things that the Congress could do, legislatively and also that the FCC could do through the administrative process, to ensure that phone costs were allocated fairly in this country and that, of course, is the point of the task force, is how can we figure out how to allocate costs fairly and do it before it's too late for thousands of our small businesses.

Mr. BILIRAKIS. Is there any possibility, Mr. Chairman, of inviting some of the Senate small business members to become a part of this task force so that much of what we gain in these hearings can be gained by them too? It might have some impact on what they do with our legislation.

Mr. WYDEN. That's an excellent point. I have talked to Senator Packwood of my own State who is on the Senate Small Business Committee about the problem of small businesses literally being unfairly singled out. I know the Senator is very concerned, as well and, as I said, any time the Senate would want to take down that House-passed legislation we could get moving again with allocating the costs of running telephone service in this country fairly. Perhaps through this task force we can come up with some recommendations that might get the Senate moving again on the important legislation that the House passed.

Mr. BEDELL. I think the gentleman from Florida just made a wonderful suggestion. I think my suggestion would be that we would ask one of the Senators to be a cochairman of such a task force and get the Senate involved as well. I think if we get them involved there's a very good chance that—I realize that it's hard for them to attend hearings but they could at least get their staff here and so on.

I think that there's some chance that maybe if we have some hearings over there, they would be involved. I think it would be a wonderful idea that instead of it being a House task force, we try to make it a joint task force.

Mr. WYDEN. I think it's an excellent suggestion and I'm going to pursue it with Chairman Mitchell and, as I said, we can begin to talk to Senators from our own home States informally. I think it's an excellent suggestion.

Mr. BILIRAKIS. Thank you, Mr. Chairman.

Well, whether we get the Senate involved directly or not, hopefully at least the results of our task force hearings will be made available to them.

I suppose then acknowledging that the breakup has taken place, can't be put back together again, the damage has been done, and I guess in the approximately 1½ years that I've been up here probably the most frustrating thing that I've run into has been this.

Practically everything that takes place up here has some good attributable to it. It may not be a good that I can see in my eyes but somebody else can see some good to it. I'm not sure that we have seen any good at all out of this and it's just horrendous that we allowed it to go this far but it's happened and it's the job of the task force to try to come up with recommendations.

Certainly we want to defer and to maybe eliminate the access charge, I suppose, but we've got to have some better—some alternatives to is, and this is something that we need from you, we need inputs from you.

Now how would you, Mr. Motley, if you were in the position to determine, acknowledging the breakup has taken place and all that, what do we do at this point in time to make things as fair as possible for everybody and particularly because this is a small business task force, particularly for the small businessman.

That probably can't be answered in just a few minutes and I appreciate that and maybe you may want to highlight answers, if you have any, and possibly submit some sort of a recommendation from NFIB that would be reflective of the small business community in general.

Mr. MOTLEY. This problem is so new to us, we really have not had an opportunity to look at everything or all the data that's out there.

As we get into it, it seems like we're uncovering the tip of an iceberg. The Commission does not look like it looked at small business problems when making its decision. Therefore, we really don't have much of a starting point.

The survey that we did is admittedly fairly primitive but it gives us some indications. It is our hope that as the task force committee goes ahead with these hearings that we will have some suggestions come up that we can continue to work on and with you on.

I also think that it was the intention of the chairman of the two Commerce committees to look at this issue again in the first 6 months of the next congress and you had access charges postponed for residences and for one-line businesses until June of next year. Unfortunately the rest of the business community has picked it up already.

I would suggest that the most immediate problem for us is that we find some way to defer those charges until everybody can come up with a fairly unanimous way to go forward. Right now it's not that way.

Mr. BILIRAKIS. In the meantime, though, is it not costing somebody money as the result of the fact that the Federal Government has said break up AT&T, they're bad, which of course is something that I think is wrong; big is not necessarily bad, but it's costing someone some money as a result of this and that money, I guess, has got to go into the marketplace in some form or another, does it not?

Mr. **Motley**. It definitely is costing somebody some money, Mr. Bilirakis, but if I could give you a particularly small business viewpoint on it, with supposedly a 12.5-percent profit guarantee for AT&T and I think the BOC's are operating at about 14 percent now with a 19-percent return on investment, you're not going to find too many small businesses out there on Main Street that have much sympathy to a short-term loss on the part of AT&T when they have been given a lot of things in this divestiture which should allow them to make a great deal of money and allowed them to do the one thing that they wanted to do before, and that is compete in a lot of different areas which are extremely lucrative.

I think that you have a short-term problem here, and that the small business community is being asked to carry the burden during that short-term problem.

Mr. **Bilirakis**. Why do you call it a short-term problem?

Mr. **Motley**. Well, some of the analysis that I've read of the situation, and granted I'm not an expert in this area, indicates that the shortfall, the problems that AT&T are experiencing right now are of a limited nature until the various different segments that they have picked up get out there and compete and start making the profits that everybody expects them to make.

Now that may not occur but that's one of the reasons that they wanted to move into these areas because they thought it was very lucrative to do so.

Now the operating companies, they're doing fairly well already. They're doing much better than most people anticipated them doing and there is some data in a study that I do have that I would submit for the record done by an economist which indicates that again their rate of return is around 14 percent right now and you don't find very many small businesses making that.

Mr. **Bilirakis**. The access charge for small businesses has gone into effect, correct?

Mr. **Motley**. Went into effect May 23, I believe.

Mr. **Bilirakis**. But the proposed access charge for residences has not gone into effect.

Mr. **Motley**. They have until June 1, 1985.

Mr. **Bilirakis**. That's when it was contemplated?

Mr. **Motley**. That's when it was contemplated but I will say that Mr. Fowler has indicated to a group of small business people on two occasions that he intends to move more quickly than that.

Mr. **Bilirakis**. But you're saying even though that is not in effect yet, that their return is still as good as 14 percent?

Mr. **Motley**. The study that I have indicates that and, as I said, I will be glad to submit it to the committee for the record.

Mr. **Wyden**. Would the gentleman yield?

Mr. **Bilirakis**. Yes, sir.

Mr. **Wyden**. I want to just ask a question about this meeting with Mr. Fowler and some of your people who serve on this SBA Advisory Task Force.

Did Mr. Fowler give a date when he planned to put residential access charges in effect?

Mr. **Motley**. I was not present at the meeting, Mr. Chairman, although the president of NFIB, John Sloane, and our Washington counsel, Mike McKivett were, and several other people who I know personally.

Mr. Fowler indicated that—this was a meeting of the entire National Advisory Committee for the Small Business Administration and they had Mr. Fowler over there to discuss the problem, and one of the arguments that they used was, of course, the equity argument, the one that I'm using today, why should we pay now when everybody else is being let off the hook.

He indicated to them as a counterargument to that that he intends to move much more quickly than the June 1 date and hopefully shortly after the first of the year.

Mr. **Wyden**. That was my understanding, that he told the SBA group that he would put access charges into effect for residences in January.

Mr. **Motley**. Which I think will probably upset the chairman of the Commerce Committee, because he intends to take another look at it.

Mr. **Wyden**. I think that's the heart of it and I want to tell my colleagues on both sides of the aisle that that just isn't going to give us time to pass a comprehensive piece of legislation to allocate telephone costs fairly to put off these tough issues until right after the election.

I think it very unfairly pits residences against small businesses and I think that's a mistake. I think we have to look at what we need, frankly, across the board and lots of us have residences and also run small businesses and I think it's particularly unfair to pit one group of Americans against another one.

We're working hard now, laboring under this new system to try to allocate costs fairly so we appreciate your comments about exactly what was said at that SBA advisory meeting and we'll probably talk to Mr. Fowler about that some more.

Mr. **Bilirakis**. But he didn't indicate that at the time he brings residences aboard, whether it be June 1 or prior, that the access fee for the small businessman would decrease.

Mr. **Motley**. Oh, no. The indication is that this particular one is only locked into place for 3 years and that it will probably go up after that.

Mr. Bilirakis, let me just make one more comment on your general line of questioning, and that is that from we can see this is an horrendously complicated matter that we're involved in. When we first got the results of the survey, we went just about everywhere we could to see if we could get data pertaining to small business. It either wasn't available or we weren't allowed to have it so we really have not been able to look at the system and I don't know even if we have the resources to look at the system, if the FCC doesn't, to come up with a solution.

All we know is that the little bit that we've uncovered disturbs us terribly and we're very fearful it will have a big impact on small business in the future. That is one of the reasons that we are so glad to see this committee, this task force.

Mr. BILIRAKIS. What was the scenario, Mr. Motley? When this thing first came up three or four years ago, you indicated you weren't aware of the problem potential and how it might affect you. You just weren't aware of what was taking place.

Somewhere along the line you became aware of it, and by your most recent statement you were looking for certain data, certain information, and it wasn't made available to you. What do you mean by that?

Mr. MOTLEY. Our research department began to try to determine what the impact of the decisions were going to be on small business.

Mr. BILIRAKIS. When was this, would you say?

Mr. MOTLEY. Mid summer of 1983. We approached the FCC, Department of Commerce, telephone companies, and we began to ask for information. Northern Telecom volunteered some information for us. The rural telephone cooperatives had some information for us. But it didn't even scratch the surface.

As a matter of fact, the information that Northern Telecom gave us is that their subscribership was much smaller as far as one-line small businesses are concerned than the results of our survey.

We really were just casting around in th dark and we still are to a certain extent except that there seems to be some obvious indications here that there's a big shift going on as far as costs are concerned.

Mr. WYDEN. Would the gentleman yield?

Mr. BILIRAKIS. Yes. I have nothing further at this time, Mr. Chairman.

Mr. WYDEN. If I understand you correctly then, Mr. Motley, what you're saying is neither the FCC nor anybody else had the data at that time to proceed with access charges.

Mr. MOTLEY. Either that or they wouldn't share it with us when we asked for it. That's not necessarily—they may not be able to share it with us. All I know is that we could not find anything to base—well, when you called to ask us to participate in the Commerce Committee proceedings, there was absolutely no data upon which to base our participation, none.

Mr. WYDEN. Mr. Gantert.

Mr. GANTERT. I would like to make one more comment if I may, Mr. Chairman, and it relates to what Mr. Motley is saying.

This is a very deep well that we're looking down into and the access charges that we've talked about this morning is just a very small part of this whole package.

If you look into the tariff which they have just written, this tariff covers an awful lot of small businesses and the Muzak portion that I represent is not an isolated case. We're talking about answering phone systems. We're talking about alarm systems. We're talking about data transcription systems, data transfer systems.

There are all kinds of small businesses that are going to be impacted by this particular tariff and what we're talking about today I think is a very small part of what is going to be impacted on small business all over the United States.

Mr. WYDEN. So it isn't just the access fee that we're concerned with. We're concerned with the tariffs and the possible increases.

Mr. GANTERT. I think the access fee is a small part of it, really. I really do.

Mr. MOTLEY. I agree with that, Mr. Chairman, wholeheartedly. It's the beginning of a big problem.

Mr. WYDEN. The gentleman from Iowa.

Mr. BEDELL. It appears to me that we've got a basic problem here in that most businesses would have some areas of their business that was not particularly profitable that would be subsidized by other parts of their business because it's important for them to have that. That would be such things, for example, as printing a catalog and so on.

It would appear to me that the suppliers of long distance telephone service could rightly have said in the past that it's terribly important for us to have or most everybody have a telephone because we make good money on our long distance phone calls and unless everybody has a telephone we're not going to be able to provide that service across the country, and therefore it makes sense for us to furnish that telephone to those individuals even at a loss and subsidize it from our profitable part, which is our long distance rates, in order to be able to furnish that service.

It appears to me now that through the courts and so on they've said we're going to separate those two systems. More than that, now we're saying that each system has to pay its own way.

It seems to me that the more proper thing to do would be to say that it makes sense for the long distance area to continue to subsidize the service so everybody has that service but we're going to see that those who provide that long distance service are equally charged in order to provide such subsidy so everybody can have a telephone.

It seems to me that's the simply thing about bypass. It seems to me it would be simple therefore to charge the people that are bypassing similar to the people that are not so that you get that money to help do it and it would make our whole system better, it would make society better, and those who say that every single segment has to pay its own way it seems to me are not looking at the total picture on what has happened in our whole society.

It just looks to me like we're looking at this thing sort of backwards in total, Mr. Chairman.

Mr. WYDEN. I think that's a thoughtful point and what we saw last year when this was debated is that much of what AT&T thought was a subsidy was really the cost of doing business and if they didn't have that connection between the local loop and the long distance line, they would have to go out and build it at their expense, considerable expense. I think we will definitely come back to the issue of what is a subsidy and what is more likely and fairly termed an appropriate cost of doing business.

Mr. BEDELL. If I were selling newspapers, I think very possibly I would feel I did not have to make a profit from putting a box in front of that house so I could put my newspaper in the box. It seems to me that would be something I would feel should not necessarily I ought to make a profit on by charging the person for it.

It seems to me we've got almost the same situation here that it's really important for whoever furnishes it for our long distance suppliers to be able to have phones everywhere which they can service and make the money they get off their long distance line.

Mr. WYDEN. With the gentleman's thoughtful point on the record, let us break now. It is 1:15. Why don't we come back at 1:45 and at that time we have Mr. William Betteridge, corporate vice president for industry matters of AT&T, Mr. Eugene Eidenberg of MCI, Mr. Thomas Smith of Northwestern Bell and Mr. Robert Snedaker, chairman of the board of United Telephone.

We will stand adjourned until 1:45.

[Whereupon, at 1:15 p.m., the subcommittee recessed, to reconvene at 1:45 p.m., the same day.]

AFTERNOON SESSION

Mr. WYDEN. The task force will come to order. We will proceed with Mr. Snedaker first, and then Mr. Eidenberg, and Mr. Betteridge.

Mr. Snedaker.

TESTIMONY OF ROBERT H. SNEDAKER, JR., CHAIRMAN OF THE BOARD, UNITED STATES TELEPHONE ASSOCIATION, AND PRESIDENT, UNITED TELEPHONE SYSTEM, INC.

Mr. SNEDAKER. Thank you, Mr. Chairman. I'm delighted to be here.

I represent the U.S. Telephone Association which represents the vast majority of all the telephone companies in the United States, plus United Telephone System and also I happen to be chairman of NECA.

It seems to me that today we are attempting to solve a problem jointly and one of the concerns I have is that we may not be focusing on the real key piece.

Mr. Motley said that Mr. Fowler made the point three times about making small businesses pay so large customers won't bypass the network, and he thought that that was going to make it bad for small businesses. But I suggest that we missed a sentence on that thrust, and the thrust is that, right now today there is a subsidy being paid on an interstate basis of $11 billion by long distance users to help keep local rates down, and I would suggest there's a like subsidy paid on intrastate basis, in fact slightly larger than that, of about $13 billion to help keep local rates down for small business customers and residential customers.

Now to the extent that the large users are encouraged to leave the network, we, representing the small business customers and the residential customers, are forcing off the network people who are paying, companies who are paying this large subsidy so we're working against our stated goal of keeping rates down for residential and small business customers.

Now the size of this subsidy, if we go back in history we're talking about an average call of $2; out of the $2, 80 cents goes toward keeping local rates down. The cost therefore of the long distance is $1.20. That represents about a 67-percent tax or subsidy to keep local rates down.

As Chairman Fowler pointed out, the big improvements in technology occur in the long distance area, not that there weren't improvements in the local area, we are aware of the improvements in the operator areas, but we haven't yet mechanized the installer repairmen, but we have seen dramatic reductions in the long distance costs.

Now I think in the recent order that came out of U.S. Court of Appeals, that court basically sustained a lot of the actions taken by the FCC.

That nonetheless doesn't relieve the problems right now of the small business customers and U.S. Telephone Association and Bob Snedaker are very concerned about small businesses. We are equally concerned about small telephone companies in rural areas, because when you talk about universal service I think the first rule that we have to accept is that the companies providing service in the rural areas have to survive. If they don't survive, then the customers that are being served by those companies will not survive. They have to survive not just barely but they have to survive in a reasonably healthy manner.

Now one of the key parts of the plan, and this plan I think as all of us know is not a new plan. Docket 78-72 has been in existence for at least 7 years.

The key piece, in my mind, is the Universal Service Fund. Now the Universal Service Fund, as Chairman Fowler mentioned, is around a billion dollars. but I don't know that a billion dollars a years, is necessarily the right figure. Maybe it should be $3.3 billion, the same as SLU, for example.

What USTA and NECA is doing, working along with NTCA, Dave Fullerton, Dave Cosson OPASTCO, NREATA, and the state associations, is to come up with a computer program that will print out several options for every single telephone company in the United States, every one of the 1,437-some-odd.

Each one of those companies with the assistance of the state association execs, with the assistance of the NECA regional people, and with the assistance of other telephone people in the state associations will look at those different scenarios to be assured that each of those small companies survive, and there are companies, and I have traveled around.

I've been in Alaska. I talked to a gentleman that owns a telephone company that has an area equal to the area of the State of New York. His local loop costs are not $1,900 but $4,500. His trunk to the long distance central office is not by a cable, wire or microwave, but it's by satellite because that's the only he can get there. If you make a long distance call from that exchange to Anchorage to another exchange, you have to go up to the satellite and down twice.

I would submit that in Alaska you have an example in a whole State of a very high cost situation but it's not limited to Alaska. The Western part of the United States has many exchanges that are very high cost and very sparsely populated.

So the plan that we have is to make darn sure that those companies survive so we do have the universal service.

Now as far as individual customers are concerned, lifeline is the way to go and I think the States have to mandate lifeline.

If there was a great demand for lifeline today, every State commission would have demanded lifeline service and I haven't heard that at the moment. That doesn't mean that it can't be done. There are two states that have applied for waivers, New York and California.

I think all of us know that on lifeline service you could have somebody living on Park Avenue that could qualify for lifeline, so it's a different issue.

One of the keys, too, that I think we maybe overlooked is that there is a mandatory pooling. When we talk about a small telephone company saying, well, I don't have a problem with bypass because I don't have any big small telephone company in my exchange so why should I be worred about bypass.

Every one of those small telephone companies are in a mandatory pool and that pool helps them because their costs are higher than the average for the pool, generally speaking. If they weren't in the pool they would probably have to pay more.

The pool helps share the cost but it's a mandatory pool that all telephone companies are in for the nontraffic sensitive portion.

Now if you have the teleport in New York City where large customers bypass the local network and revenues are not thrown into that pool, then everybody suffers. The telephone company and the very small exchanges suffer, too, so the mandatory pool, the sharing of this, and the earning on that pool is very important.

Now I would like to congratulate the gentleman that mentioned this morning the fact that he had an option he was keeping open. I agree with him a hundred percent. He's an REA company. REA encourages their members to provide, or the people that they loan money to to provide all one-party service. I've always felt that that's sort of gold-plating the plant and he kept open the option of four-part service and I think that's extremely smart on his part. I agree with him a hundred percent because this is a way of sharing that high fixed cost of the local loop that's there regardless of whether you use it or not, regardless of whether you make a hundred calls a day or receive a hundred calls a day, or all interstate or non interstate, that cost is there. I think that that's a move in the right direction.

Now one other thing and I will conclude, is that the largest bypassers—and that was brought out today—the largest bypassers are the State and Federal Governments.

We heard an example of Oregon today where they're going to save all this money and this is true in State after State after State.

In conclusion, I think we're on the right track. I know we have the same goals. If somebody asked me specifically what is your solution to help the small business customers, I might say you might consider, although the timing on this might not be very good, a waiver for small business customers so they won't have to pay the telephone excise tax. That amounts to $9 per month per customer.

The companies that are members of the association, the average dues for the association represented here today, the average dues are $72. That's $6 per month per member.

I just throw those out to attempt to put in perspective what we're talking about on the end user charge.

I think there's one other thing that's very important and that is the charge that's in now for the business customer multiline will stay in place basically for at least 3 years, but during this same period, there will be a 15-percent reduction in long distance over and above the 6 percent, that 15 that will go in at the same time the $2 charge goes in during the first half of 1985, and another 15 when the next, whatever it is, $1.50, goes in and that will total 36 percent, which is in the target that Chairman Fowler mentioned of 35- to 40-percent rate reduction on long-distance rates.

With that, I appreciate the opportunity, Mr. Chairman, for being here today. Thank you.

[Mr. Snedaker's prepared statement follows:]

PREPARED STATEMENT OF ROBERT H. SNEDAKER, JR., CHAIRMAN OF THE BOARD, UNITED STATES TELEPHONE ASSOCIATION, AND PRESIDENT, UNITED TELEPHONE SYSTEM, INC.

Mr. Chairman and members of the Telephone Task Force, I am Robert H. Snedaker, Jr., Chairman of the Board of Directors of the United States Telephone Association (USTA) on whose behalf I appear before you today. I am also President of United Telephone System, Inc., headquartered in Kansas City. I am also Chairman of the Board of the National Exchange Carriers Association (NECA). Both USTA and my company share the Task Force's concern about the need to preserve universal telephone service in this country. We believe, however, that full implementation of the FCC's Access Charge Plan, as presently constituted, is the best method to enable telephone companies to continue to provide service at reasonable rates.

USTA, headquartered in Washington, D.C., represents most of the 1,454 telephone companies (Bell and Independent) in the nation. At year end 1983, all U.S. telephone companies served over 111 million access lines in over 17,900 exchanges, with over

$210 billion invested in plant and about 926,000 employees. Total 1983 telephone company revenues were $84 billion.

My Company, United Telephone System, Inc., headquartered in Kansas City, provides administrative, managerial and other professional services to the twenty operating telephone companies, providing local exchange and related telecommunications services in nineteen states,* that comprise the "United Telephone System." All of the Companies are wholly-owned subsidiaries of United Telecommunications, Inc. At year end 1983, the United Telephone System (UTS) served 3,034,378 access lines in over 3,000 communities, with over $5.5 billion invested in property, plant and equipment, and 24,282 employees. Total 1983 revenues were $1.9 billion.

But, you should not be misled by the size of these numbers; most telephone companies are small businesses. Apart from the Bell companies, there are 1,432 so-called Independents which serve 59% of the nation's geography. Many are family-owned companies that serve less than 10,000 telephone access lines in rural communities. So, we are vitally interested in the issues being considered by the Task Force.

Before I address those specific issues, I think it would be useful to briefly review the economic circumstances that underlie the FCC's end user charge policy.

Telephone Network Costs and Separations Procedures

I'd like to begin with the economic characteristics of the telephone network. The basic components of that network, as illustrated in Exhibit A, are:

(1) Customer Premises Equipment (CPE) including the telephone set itself as well as intra-premises or "inside" wiring;

(2) The local loop, or wire, that connects the customer with the local switch;

(3) The local central office, or switch, which performs the basic function of setting up the connection between the called and calling party; and

(4) The long distance network.

The cost characteristics of the telephone network are not homogeneous. CPE, the local loop, and even a portion of the local central office, are facilities dedicated to the use of individual subscribers. The costs of these facilities are independent of how much they are actually used by customers. To take a simple example, the cost of a basic telephone set is the same whether the customer uses it twenty-four hours a day or not at all. Because the costs of these facilities are not affected by usage, they are referred to as non-traffic sensitive, or NTS, plant.

The costs of other components of the network, on the other hand, are affected by usage. For example, the capacity, and hence the costs, of the local switch and long distance network are a direct function of customers' calling volumes. Because the costs of these components of the network are primarily determined by usage levels, they are referred to as traffic-sensitive plant.

With that background, let's now turn to the separate but related matter of how these costs, and particularly NTS costs, have been recovered from users of telephone services.

Central to this issue are what are referred to as jurisdictional separations procedures. Under our dual system of regulation of the telephone industry, the FCC is responsible for regulating interstate toll service, and the respective state regulatory bodies are responsible for regulating local exchange and intrastate toll services.

Consequently, it has been necessary to allocate or "separate" the costs of the telephone network between the state and federal jurisdictions in order to determine the appropriate level of rates to be charged for state and interstate services. Jurisdictional separations procedures are the cost allocation methodologies that have been developed to accomplish this essentially legal function.

At least in principle, the separation of traffic-sensitive plant is relatively straightforward. Because the costs of this plant are a direct function of usage, it makes economic sense to allocate the costs of this plant between the state and federal jurisdictions on the basis of their relative use by state and interstate services.

The allocation of NTS costs, however, is another matter. As was stated by the U.S. Court of Appeals for the District of Columbia Circuit, in its June 12, 1984 Opinion in NARUC v. FCC, Case No. 83-1225 (pgs. 19-20), "(p)lant costs are nontraffic sensitive when they do not vary with the extent to which the facilities are used. The basic cost of installing and maintaining a local loop, for example, remains the same whether the subscriber, or 'end user,' uses the loop to make one call or a hundred, and whether those calls are local or long-distance. Some switching costs, on the other hand, are traffic-sensitive. They in fact increase with usage; for example, as more calls pass through the equipment, heavier, more costly switches must be employed."

Prior to 1943, this essentially economic view of telephone network costs was reflected in separations procedures. Under what was called the "board to board" principle, only the interstate share of long distance facilities (i.e., from toll board to toll board) were allocated to, and recovered from, interstate toll services. Because NTS costs were not affected by toll usage, those costs were recovered directly from customers through local service charges.

In 1943, however, the FCC adopted what is called the "station-to-station" principle of separations. This principle holds that since interstate services, in a literal sense, "use" the NTS plant of the network, they should be required to help defray the costs of those facilities. Consequently, separations procedures were revised to allocate a portion of NTS costs, including the costs of telephone sets of "stations" as well as the local loop to the interstate jurisdiction.

Since then, the method of allocating NTS costs between the state and interstate jurisdictions has been subject to frequent revision, the effect of which has been to allocate an ever greater proportion of those NTS costs to the interstate services. Under the existing SPF (subscriber plant factor) formula, a nationwide average of 26%, or approximately $11 billion, of the total NTS costs of the network are allocated to and recovered from the interstate toll services. These allocated NTS costs constituted almost 40% of AT&T's total revenue requirements of MTS and WATS services, prior to the implementation of access charges.

The FCC's End User Charge Decision

The existing separations procedures are largely the product of an era of regulated monopoly. With the advent of competition in the interstate long distance market over the past decade, however, the economic fallacy of recovering NTS costs from the interstate toll services revenues has become increasingly apparent.

To place the issue in a more concrete perspective, let's examine the effect of the existing separations procedures at an individual customer level. The average monthly cost of a local loop today is approximately $26. Prior to the implementation of access charges, the NTS costs allocated to the interstate toll services amounted to an average of about 18¢ for each minute of use.

This arrangement is obviously beneficial for customers making no interstate toll calls, who thereby enjoy a local service for a total price that is some $7 lower because of the contribution being made by the interstate services. However, to the extent that customers do make interstate toll calls, the benefit of the toll contribution to local rates is to varying degrees offset by higher toll rates. For instance, a customer who makes 30 minutes of interstate toll calls will be contributing, through the toll charges, $4.50 to cover the NTS costs allocated to interstate toll services, therefore negating most of the $7.00 reduction in his/her local rates.

Simply put, the effect of existing separations procedures is to redistribute part of the costs of local loops among subscribers in a manner proportionate to toll usage. If all subscribers used exactly the same amount of interstate toll usage, the net impact of this practice would be nil. That is, each customer would be contributing, through interstate toll rates, an amount exactly equal to the reduction in local rates made possible by the toll contribution to NTS costs. (Even then, it should be noted, the allocation of NTS costs to interstate toll service has the perverse economic effect of overcharging for toll calls and thereby artificially discouraging usage of the toll network.)

In fact, however, a large proportion of interstate calling is accounted for by a very small proportion of telephone service subscribers. To take a fairly typical example, one Bell Operating Company (BOC) reports that 1% of its business customers accounted for 42% of its total business MTS revenues, and 10% accounted for 75% of those revenues.

Thus, the effect of allocating NTS costs to the interstate jurisdiction and recovering those costs through toll charges is to require high volume toll users to contribute to, or subsidize, the costs of facilities dedicated to the use of other subscribers. To give an example, a customer making 4,000 minutes of interstate toll calls in a month would be contributing about $600 to the recovery of NTS costs, or about 30 times the cost of the local loop used to serve that customer.

In an era of regulated monopoly, high volume users had little choice; they either paid the going rate, or they didn't use the service. In today's environment, however, competition is providing these customers with an increasing variety of options by which they can "bypass" the local switched network and avoid the subsidy built into the charges for using that network to originate and terminate long distance calls.

The consequences of attempting to maintain the practice of extracting an NTS contribution from toll services, then, is twofold. First, it provides an artificial or uneconomic incentive for large volume users to bypass the network. That is, those customers will be induced to utilize facilities that are less expensive relative to exchange carriers' tariff rates but more expensive relative to exchange carriers' underlying costs.

Second, absent stringent regulatory controls over bypass, exchange carriers would be confronted with the loss of those customers who currently provide a substantial portion of the NTS contribution. Simply put, Local Exchange Carriers will not be able to require high volume toll users to subsidize other customers in a competitive marketplace.

The FCC's Access Charge Plan was a direct and rational response to the threat of uneconomic bypass. Essentially what the FCC's end user charge plan does is to require that NTS costs be recovered from the causer of those costs - the end user. Not only does this change in the method of NTS cost recovery forestall the threat of uneconomic bypass, but it also moves the industry towards cost-based pricing - a necessary step for the long term viability of local exchange carriers in an increasingly competitive environment.

What is somewhat confusing about the FCC's end user charge plan is that the Commission elected not to alter the proportion of NTS costs allocated to the interstate jurisdiction. However, the fact that NTS costs will continue to be allocated to the interstate jurisdiction and will be recovered through "interstate" end user charges is largely a matter of form and not substance. From a purely economic perspective, what the FCC's plan does is to simply require that the costs of NTS facilities be borne directly by the individual subscribers to whose use those facilities are dedicated.

The Effect of End User Charges on Small Business Telephone Rates

The FCC's end user charge plan has elicited considerable concern about the impact of those charges on small business users. Indeed, this Task Force was created to address precisely those concerns.

In responding to those concerns, I would first like to reiterate an essential point. The end user access charge has nothing to do, and should have nothing to do, with whether, or how much, an individual customer uses interstate toll services. From an economic perspective, the end user charge is simply a reflection of the fact that NTS costs are caused not by toll usage but by the individual customer's, or end user's, decision to subscribe to telephone service, and therefore should properly be borne by that customer.

Thus, the FCC's end user charge plan requires small business users, like all other users, to do nothing more than to cover the costs of those local exchange facilities provided for their use.

While I appreciate the Task Force's concern with the impact of end user charges on small businesses, I believe that that concern is not warranted; and that, indeed, the potential impact on this class of subscriber has been grossly exaggerated.

For example, in the United Telephone System there are 69,059 Key System accounts. The profile of these customers is shown in Exhibit B. The average account has 2.3 lines and generates $138 per month for normal long distance calling (message toll service, or MTS), $130 per month for line, equipment, and network services, and $36 per month for directory advertising. The average customer, then, generates approximately $304 of revenue per month for the UTS company. Actually, this is conservative because revenues from WATS calling are not included. Based on the revenues just described, these customers account for approximately 42% of the MTS revenues from the business sector.

The profile I have just described compares closely with that described in the recent National Federation of Independent Business petition to the FCC for further reconsideration of end user charges. In that petition, the NFIB deals with an illustrative 2-3 line subscriber whose total monthly bill falls between

$200 and $500 per month with approximately 25% of that amount going for long distance calling. Additionally, 55% of its members have annual gross receipts of $200,000 or more.

Returning to the typical UTS small business subscriber, the increase resulting from the weighted average UTS multiline business end user charge of $5.52 is less than $13 per month. This amounts to less than $156 per year. This increase is mitigated by two factors. One is the recent 6.1% reduction in interstate long distance rates, which should increase as more of the FCC's Access Charge Plan (particularly, residential end user charges) is implemented. The other mitigating factor is the customer's marginal tax bracket. Thus, it is possible that the customer would feel no effect at all, or even experience a net decrease in his/her bill if he/she is a heavy interstate user. On the other hand, the cash flow impact upon his/her business will almost certainly be less than $100 per year.

I do not believe that this effect portends financial hardship for the small business sector of our economy. Thus, I urge the Task Force not to take any action that would reduce or eliminate the end user charges currently in effect. They are essential for the telephone industry to move from a regulated monopoly environment to a cost-based, competitive arena.

Bypass

I must emphasize that the alternative to pricing telephone service so as to more closely recover the costs from the cost-causers is bypass. In the words of the FCC, ". . . bypass is an actual threat and present danger." (Third Report and Order, released February 28, 1983, in Docket No. 78-72, Phase I, paragraph 107.) The U.S. Court of Appeals for the District of Columbia Circuit recently held that ". . . the FCC's treatment of the bypass issue is adequately reasoned . . ." (Opinion, dated June 12, 1984, in NARUC v. FCC, Case No. 83-1225, pg. 45).

As that same Court noted, Western Union, for example, already has a growing investment of over $100 million in local distribution facilities as part of a specific program to reduce its dependency on the Bell System (pg. 46-47). Some parties have suggested that the problem can be cured by denying potential bypassers permission to construct facilities; but, both the FCC and the Court (pg. 47) rejected this proposal as unsound and unworkable. To the extent that access charges are set at excessive levels, there can be little doubt that interstate users will be encouraged to invest in unnecessary and duplicative facilities. The Court concluded that the ". . . FCC sufficiently established the existence of bypass as a real market force." (pg. 49).

Moreover, once begun, the debilitating effects of bypass will spread. The nature of bypass is that it produces a vicious spiral-effect; that is, the more customers that drop off the network, the more costs that are left for the remaining customers to bear, which will cause higher rates that will force more customers to cancel service, and so on. In other words, all customers need to understand, appreciate and accept the prospect of comparatively moderate increases in telephone rates to cover today's costs of service, in order to avoid virtually prohibitive increases that will surely result in the future if arbitrary and uneconomic incentives to bypass are continued. Otherwise, the telephone industry faces escalating earnings deficiencies, which in private business always eventually leads to financial ruin.

More importantly, it must be recognized that in the environment of interstate access charges, the impact of bypass is not limited to just those telephone companies which have large customers that leave the local network for alternative communication routes. The interstate Carrier Common Line Charge is calculated, essentially, by dividing the allocated non-traffic sensitive access costs by the forecasted minutes of use. If an exchange carrier is subsequently bypassed, it will obviously not experience or charge for the minutes of use it had expected. Thus, that carrier will pay into the Carrier Common Line Pool less revenues than were anticipated for the year. So long as participation in the interstate Carrier Common Line Pool, administered by the National Exchange Carriers Association (NECA), is mandatory for all exchange carriers (under the FCC's Access Charge Plan), all such exchange carriers will effectively be precluded from recovering from the Pool the full authorized rate of return.

Further, since such a result will cause exchange carriers to report higher costs to the NECA in subsequent years, thereby driving the Carrier Common Line Charge higher, more bypass will be stimulated and the opportunity for the Pool to earn the authorized rate of return will be increasingly diminished. In other words, the vicious spiral-effect of bypass can and will eventually adversely impact all exchange carriers.

Even the U.S. Congress has recognized the evil of bypass. A study entitled "The Economic Issues of a Changing Telecommunications Industry" was issued by the Joint Economic Committee, Congress of the United States, on October 3, 1983. The study, written by staff economist Dale Jahr, succinctly states that:

> "Universal service is jeopardized by both (customer) dropout and bypass, but bypass is the largest threat to the economic feasibility of the public phone network . . .
>
> "This applies to all areas of the country, high costs and low cost alike." (pp. 16-17).

Mr. Jahr has subsequently addressed these same principles in a Staff Study prepared for the Joint Economic Committee, Congress of the United States, dated March 1, 1984, entitled "Public Policy Considerations of Pricing Telephone Services."

The Congressional Budget Office (CBO), Congress of the United States, also addressed these issues in a June, 1984 study entitled "The Changing Telephone Industry: Access Charges, Universal Service, and Local Rates." As has been widely reported, that study does not support the anti-access charge approach that was contained in S.1660 and H.R. 4102. It concluded that such legislation ". . . might prove difficult to administer and have unintended consequences for the development of new technology." (pg. xiii). Instead, the CBO suggested that:

> "The Congress might choose to take no action and permit the FCC to implement its access charge program. A 'do nothing' approach could be justified for several reasons. First, changes in telephone rates might be viewed as being similar to price changes for other services. While all price changes tend to benefit some individuals at the expense of others, the government does not normally seek to freeze prices in an attempt to protect individuals who might otherwise suffer. Second, the level of access charges now proposed--limited to $4.00 monthly until 1990--might not be considered to be high enough to cause extreme hardship. Third, the FCC has proposed to establish a Universal Service Fund to assist the subscribers of high-cost companies and is now exploring means of exempting low-income subscribers from access charges . . ." (pg. 44).

Finally, I must refer to the June 12, 1984 Opinion of the U.S. Court of Appeals for the District of Columbia Circuit, in the case of NARUC v. FCC, No. 83-1225. After an exhaustive analysis of all of the arguments against the FCC's Access Charge Plan, the Court affirmed the general principles contained therein, stating that:

> "Over five years' study of complex and far-ranging issues set the foundation for the FCC's orders in this case. The Commission predicted industry trends and the impact of rate changes, reconciled widely diverse policy goals and numerous competing interests, and devised solutions to novel and difficult problems. Confronting rapid and fundamental changes in the telephone industry as a result of competition and fast-moving technology, the FCC acted for the most part with flexibility and care. The Commission's work fell short of the ideal at several turns, but our review does not and cannot require perfection. (citation omitted); VOLTAIRE, DICTIONNAIRE PHILOSOPHIQUE (Dramatic Art) (1794) ("Le mieux est l'ennemi du bien" -- the best is the enemy of the good).
>
> "We do not find unreasoned the Commission's determination that, to the extent practical, telephone prices should be 'based' upon the true cost characteristics of telephone company plant. (citation omitted) Nor, with limited exceptions, can we quarrel with the FCC's exercise of judgment in deriving workable formulas, estimating numbers that cannot be mathematically proved, and making equitable assessments of the speed with which changes should be introduced.
>
> " Further refinements to the FCC's plan could be debated endlessly. However, the Commission has reached a point in its deliberations where 'a month of experience will be worth a year of hearings.' (citation omitted) The FCC has not achieved a plan of pristine quality. But '[i]n the words of Voltaire: Perfection is attained by slow degrees; it requires the hand of time.' (citation omitted)"

I respectively urge the Task Force to heed the wisdom of these words, and not seek by legislation to reverse any part of the FCC's Access Charge Plan now in effect. Thank you very much.

R. H. Snedaker, Jr.
President
United Telephone System, Inc.
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Kansas City, Missouri 64112
# 913/676-6630

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* Arkansas, Florida, Indiana, Iowa, Kansas, Minnesota, Missouri, Nebraska, New Jersey, North Carolina, Ohio, Oregon, Pennsylvania, South Carolina, Tennessee, Texas, Virginia, Washington, Wyoming

EXHIBIT A

JOINTLY USED, OR COMMON, TELEPHONE FACILITIES

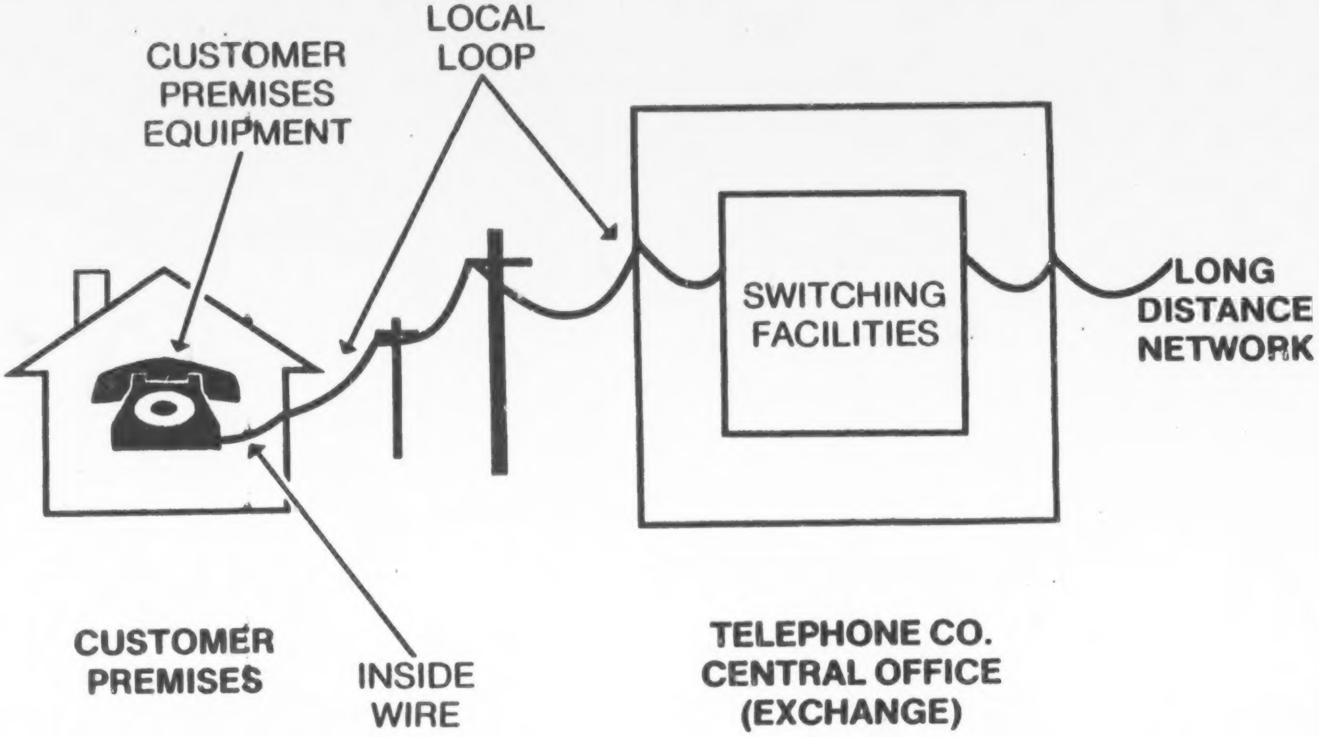
CUSTOMER
PREMISES
EQUIPMENT
LOCAL
LOOP
SWITCHING
FACILITIES
LONG
DISTANCE
NETWORK
CUSTOMER
PREMISES
INSIDE
WIRE
TELEPHONE CO.
CENTRAL OFFICE
(EXCHANGE)

EXHIBIT B

PROFILE OF UNITED TELEPHONE SYSTEM
KEY SYSTEM ACCOUNTS

1.	Accounts	69,059
2.	Lines	155,789
3.	Lines/Account (2 ² 1)	2.3
4.	Long Distance Revenues/Month	$9,560,172
5.	L.D. Revenue/Account (4 ² 1)	$138
6.	Recurring Revenues/Month (Lines, Equipment, Network Service)	$8,953,077
7.	Recurring Revenue/Account (6 ² 1)	$130
8.	Directory Advertising Revenues/Month	$2,467,345
9.	Directory Advertising/Account (8 ² 1)	$36
10.	Total Revenue Month (4 + 6 + 8)	$20,980,594
11.	Total Revenue/Account/Month (10 ² 1)	$304

Mr. WYDEN. We will hear from Mr. Smith at this point.

TESTIMONY OF THOMAS D. SMITH, VICE PRESIDENT AND CHIEF EXECUTIVE OFFICER, NORTHWESTERN BELL CO. IN IOWA

Mr. SMITH. Thank you, Mr. Chairman.

I am Tom Smith and I am vice president and chief executive officer, Northwestern Bell in the State of Iowa.

A little background. Northwestern Bell's primary business as a local exchange company is information distribution. We provide business and residence customers with local and long-distance service within defined calling areas.

We also provide other long distance carriers with access to our local customers, and only if we continue to provide reasonably priced quality service will we continue to have a viable business.

Technological advancement and the advent of competition, along with the focus on divestiture forced an examination of the telephone industry's pricing structure, which is what I believe we are here to discuss today.

We strongly believe that basic economic principles and the principle of fairness demand that our industry's historic system of price subsidies be changed to a system that is cost-based.

What we really want is a pricing policy that is fair to all customers. In a competitive environment, pricing some services below actual cost, as we have done over the years, challenges our future financial viability.

Requiring some customers to pay more than the actual cost for their services so that others can have service at less than cost drives customers to bypass our network.

Microwave, satellite, fiber optics, and other new technologies make it possible for some customers to leave our local exchange network to avoid subsidizing other customers. Some large users are already doing this and others are studying the option.

We must continue and eventually remove telephone pricing subsidies or local exchange companies such as ours will lose still more business to competition and bypass.

Don't misunderstand my point. We support fair competition. We just don't believe that continued subsidies in a competitive telecommunications marketplace are compatible. We can't meet competition in Iowa with a pricing structure designed for monopoly environment.

In Iowa, as was mentioned earlier, just over 1½ percent of our business customers generate 50 percent of our business revenues. Close to 7 percent of our business billings statewide is generated by 21 large businesses in metropolitan Des Moines.

That revenue is permanently jeopardized if we are not free to compete effectively for this business. Should we lose that revenue, we would have to raise the price of our service to primarily residents and small business customers for whom bypass is not now feasible.

We must recognize that in a regulated business, someone has to pay. Give special breaks to some customers and others will have to pay more.

However, we believe the answer is not special breaks or subsidies, but cost based pricing which permits competition. To do that, we must reduce the subsidies which require that our charges for long distance include a substantial share of the cost of providing local service.

The FCC attempted to reduce those subsidies when it devised the access charge plan in docket 78-72. End user charges are designed to replace that portion of the long distance subsidy no longer available to our company.

As a result of Docket 78-72, on May 25 Northwestern Bell in Iowa began charging multiline business customers an additional $4.98 per line per month. That increase was countered, as we've heard already today, by an average 6 percent reduction in AT&T's long distance charges and reductions by other carriers and resellers.

Mr. WYDEN. I don't mean to interrupt, but if you could just summarize the rest of your remarks and we'll make all this a part of the record.

Mr. SMITH. OK, I will summarize by saying that we believe that telephone service is still one of the best values in the State of Iowa and we're working on additional ways to continue that.

Also, our basic concept is again to eliminate subsidies and be fair to all customers. We are equally dependent on large and small business accounts for our business revenue. We don't want repricing to drive any customers off our network, large, small, business or residence.

It is our view and belief that cost base pricing for all customers makes economic sense and we also feel that it is critical to our customers' continued enjoyment of the world's very best telecommunication system.

I want to again thank you for inviting me here today.

[Mr. Smith's prepared statement follows:]

PREPARED STATEMENT OF THOMAS D. SMITH, VICE PRESIDENT AND CHIEF EXECUTIVE OFFICER, NORTHWESTERN BELL COMPANY IN IOWA

I'd like to thank Congressmen Wyden and Bedell and the other members of the Task Force for the invitation to testify here today.

My name is Tom Smith and I am Vice President and Chief Executive Officer for Northwestern Bell operations in Iowa. Before assuming that position last fall, I was Vice President responsible for the Company's Advanced Information Markets. I've also served as Treasurer and in a variety of other positions in my 22 years with Northwestern Bell.

This task force has asked me here to address the effect of the access charges on small business. I'd like to do that within the framework of how Northwestern Bell views these issues and how I personally assess the effect on Iowa.

On January 1st of this year, as I'm sure you are all aware, the ownership of Northwestern Bell, a five state Bell Operating Company, shifted from AT&T to a newly-formed holding company, U S West. Under the terms of the Modified Final Judgment of U.S. District Court Judge Harold Greene, AT&T agreed to divest itself of the operating telephone companies and the Justice Department agreed to drop its long-standing anti-trust suit against AT&T and the Bell System.

Northwestern Bell's, primary business as a local exchange company, is information distribution. We provide business and residence customers with local and long distance service within defined calling areas. We also provide other long distance carriers with access to our local customers. Only if we continue to provide reasonably-priced, quality service will we have a viable business.

Technological advancement and the advent of competition, along with the focus on divestiure, have forced an examination of the telephone industry's pricing structure which is what we are discussing today. We strongly believe basic economic principles and the principle of fairness demand that our industry's historic system of price subsidies be changed to a system that is cost-based. What we really want is a pricing policy that is fair to all customers. It should be mentioned that when the industry and state regulators use the term "cost", we are including profit -- that profit being our allowed rate of return.

In a competitive environment, pricing some services below actual costs -- as we have over the years -- challenges our financial viability. Requiring some customers to pay more than the actual cost of their service so that others can have service at less than cost drives customers to bypass the network. Microwave, satellite, fiber optics and the other new technologies make it possible for some customers to leave our local exchange network to avoid subsidizing other customers. Some large users are already doing this and more are studying the options.

We must continue to reduce . . . and eventually remove . . . telephone pricing subsidies, or local exchange companies, such as Northwestern Bell, will lose still more business to competition and bypass.

Please don't misunderstand our point, we support fair competition. We just don't believe continued subsidies and a competitive telecommunications marketplace are compatible. We can't meet competition in Iowa with a pricing structure designed for a monopoly environment.

For several years, Iowa has been on the leading edge of competition in the telecommunications industry. The Iowa Commerce Commission was the first in the nation to deregulate inside wire and customer premises equipment. MCI first joined with an independent company exchange in Representative Bedell's district in Northwest Iowa to complete long distance calls nationwide. We have competitors for long distance traffic within the state including competition for our intralata long distance service. One such firm claims a 29 percent share of the toll traffic in Cedar Rapids, Iowa's second largest city.

More than two dozen Iowa businesses are using private microwave systems in lieu of telephone company facilities. There are in excess of 200 earth stations receiving satellite transmissions. The John Deere Company invested in a switching system to move both voice and data traffic in its plant in Waterloo. As a result of the Deere decision, we lost nearly a million dollars in annual revenue. We believe it's clear that if the artificial economic incentive for bypass is not removed, the number of bypassers will undoubtedly grow.

Large businesses and the interexchange carriers are the prime candidates for bypassing the Northwestern Bell network. The geographic and revenue concentration of our large customers make us particularly vulnerable.

In Iowa, just over one and one-half percent of our business customers generate 50 percent of our business revenue. Close to seven percent of our business billing statewide is generated by 21 large businesses in metropolitan Des Moines. That revenue is permanently jeopardized if we are not free to compete effectively for this business. Should we lose that revenue, we'd have to raise the price of our service to primarily residence and small business customers -- for whom bypass is not feasible.

We must recognize that in a regulated business, someone has to pay. Give special breaks to some customers -- be they carrier customers, residence, or businesses large or small -- and others will have to pay more. However, we believe it is not special breaks or subsidies, but cost-based pricing which permits competition. But to do that, we must remove the subsidies which require that our charges for long distance include a substantial share of the cost of providing local service. The FCC attempted to reduce those subsidies when it devised the access charge plan in Docket 78-72. End user charges are designed to replace that portion of long-distance subsidy no longer available to NWB-Iowa.

As a result of 78-72, on May 25th Northwestern Bell in Iowa began charging multi-line business customers an additional $4.98 per line, per month. That increase was countered by an average 6 percent reduction in AT&T's long distance charges and reductions by other carriers and resellers.

It has been suggested that implementation of access charges threatens small business.

We believe the rates we charge business customers are fair. It is a fundamental business policy to expect a customer's payment for service to cover the cost of providing that service. We are confident that if we start pricing local service at more than its cost, we'll see competition for that service.

With the rates in effect in Iowa, a multi-line business customer pays an average of $45 per month per line. That includes the customer access line charge. Also included in this price is unlimited local calling and the ability to connect to any other telephone anywhere in the world. Also, competition in Iowa has given businesses a host of long distance companies and equipment vendors to choose from, a choice which potentially enables many to lower their communications expense.

At the request of the Task Force, we looked at 54 business accounts ranging from 2 to 21 lines in a variety of enterprises--retail, manufacturing, service and government to determine the net effect of the access charge on small business. However, we cannot determine the effect on these firms because the interlata and terminal markets are competitive and we have no access to other firms' billing information. At minimum we know that if they are customers of AT&T, they are receiving a 6.1% rate reduction an their interstate long distance. Additionally some resellers and carriers are even more competitively priced and, of course, these businesses have many competitive terminal equipment options.

Also, according to a four-state study commissioned by the Small Business Administration, and covering 1978-1982, telephone expense accounts only for approximately 1.7 percent of small business operating expense. The study of 555 businesses with fewer than 50 employees, shows annual operating expenses averaging about $77,000, and a $1,329.00 annual expense for phone service. That figure includes local service, long distance and terminal equipment.

In fact, we believe that local telephone service is one of the best values in the small business operating budget, and we are confident it will remain so.

Currently pending before the Iowa Commerce Commission is a Northwestern Bell proposal to offer local measured service to businesses. If approved, business customers will have the option of dial tone service at a reduced price. Those customers whose usage patterns require less than unlimited local calling, can choose from a number of measured offerings to help them control their communications costs.

Additionally, we offer several packages of services tailored specifically for small businesses. With what we call our "multi-line variety package," customers from 2 - 30 lines can customize their telephone system without the expense of special equipment. We can package such features as "intercom," "conferencing," "call transfer," "call waiting," "call forwarding" and "alternative answering," giving small business customers virtually all the features of a large PBX system, without the additional costs.

In summary, we are equally dependent on large and small business accounts for our business revenue. We don't want repricing to drive a single customer, large or small, business or residence, from our network. And we don't think it has to.

It's our view and strong belief that cost-based pricing for all customers makes economic sense and it's fair. We further believe that an expeditious transition to cost-based pricing for all customer services is critical to our constituents' continued enjoyment of the world's best telecommunications service.

Again, I want to thank you for inviting me to testify and welcome any questions you have.

TESTIMONY OF EUGENE EIDENBERG, SENIOR VICE PRESIDENT, REGULATORY AND PUBLIC POLICY, MCI COMMUNICATIONS CORP.

Mr. EIDENBERG. Mr. Chairman, thank you. I also appreciate the opportunity to appear before the task force. I will submit my prepared statement for the record and just make, if I can, one or two general observations about the overall issue that the task force is confronting and then leave it to questions that may follow.

I think we need to understand or reunderline a few fundamental principles, No. 1 of which is that technology is what is driving this industry.

I heard comments this morning that suggested that there is some belief that willful decisions by Federal policymakers, either at the regulatory or at the judicial level, created the pricing and the financing dilemmas that we face in the telecommunications industry today.

That simply doesn't square with the historical record. The technology is making it possible for very cost effective interconnections to be worked out with long distance telecommunication services and the FCC, it seems to me, is responding with an effort to try and put in place public policies that square with the reality of that technology.

By putting that kind of public policy in place, obviously there are going to be some dislocations as we move to a cost based pricing mode so that the underlying subsidies built into the prices, which are artificial and uneconomic will need some attention in order to work through that transition with sensitivity.

But if the result of going through that transition is to put in place another set of policies which try and keep for some groups a subsidy that is going to be denied others, we are simply going to compound the problem.

Let me just point out one or two examples. City dwellers by and large right now under local rate systems subsidize suburban people. Low income urban residents who live in the lowest cost local telephone areas where you have the highest densities and the most cost effective distribution for local technology, are in fact paying the subsidies, or paying for telephone service for people who live in affluent suburban areas.

Lifeline rates as they are presently structured provide opportunities for people who have ski lodges and other vacation homes, second and third vacation homes, to get telephone service in California for $2.50 a month.

We've got a number of absurdities, which is the only way to describe them, built into the current telephone pricing system which need to be worked out over time.

The interexchange industry, of which MCI is a part, obviously is prepared to pay its fair share during this transition and to continue paying our fair share of local plant for which we make use.

We pay now, as of May 25, approximately $330 a line every month for every line we use. We have now in excess of 100,000 access lines in the Nation's network for which we pay $330 a line. That increased on May 25 from about $230 a line.

When we get equal access, which is coming on line now, that charge will jump to about $600 plus per month per line.

The point is that the costs are there. They need to be recovered. We make surveys of our customer base all the time because we're in a competitive business. Our customers don't want to subsidize other people. They want to pay a fair price for the service they use from us and I just urge the task force as it considers the very complex problems of transition, as we work some of the absurdities out of the pricing system, to look at the underlying logic of what the FCC is doing and to understand that what the FCC has put in place is a system which will get us to a world in which people will be rationally paying for the costs they bring to bear on that system.

If there are people or areas of the country that deserve and warrant support and subsidies, we ought to do it on top of the table and not by building in uneconomic subsidies into the overall pricing system of telephone service. Once we start back down that path and reverse what the FCC has painfully put in place as a logical solution, we will then create preconditions for what is—I don't want to use hyperbole—the most serious threat to universal service and to the financial viability of local telephone companies and that is the decision by large numbers of major users who can't afford not to use the technology which is there to bypass the system.

The suggestion by some members of the task force that we could tax or we could derive revenue from bypassers I think misunderstands the use of that technology and misunderstands the consequences of trying to put in place preventive measures for the use of technologies which are available. It's a virtual impossibility to enforce charges to limit bypass systems. The technology is that cost effective and that efficient.

It is better, in my judgment, to work our way through this process, holding to the logic of the FCC approach. Let the Federal Communications Commission's Commissioners and staff, working with State regulators and under the watchful eye of Congress as it continues to observe the system, negotiate out the transition so that it in fact is fair to all users and doesn't end up having some people subsidized at the expense of others.

Thank you, Mr. Chairman.

[Mr. Eidenberg's prepared statement follows:]

PREPARED STATEMENT OF EUGENE EIDENBERG, SENIOR VICE PRESIDENT, REGULATORY AND PUBLIC POLICY, MCI COMMUNICATIONS CORP.

Mr. Chairman and members of the Task Force, my name is Eugene Eidenberg, and I am Senior Vice President for Regulatory and Public Policy of MCI Communications Corporation. I am pleased to be here today to address the concerns of small business about recent changes in telecommunications policy.

At the outset, I want to say that we understand and sympathize with the concerns expressed by both business and residential customers about what must seem to be a confusing set of circumstances in the telecommunications industry. Even the participants in the industry sometimes have had trouble making sense out of everything that is happening. However, I believe that most of the major policy decisions have been made and are now in the process of being implemented. With a growing sense of stability and certainty, both telecommunications service providers and customers -- especially small businesses -- should begin to enjoy the myriad of benefits that will flow from the many changes technology is bringing to the telecommunications industry in the United States. The underlying reality which none of us should lose sight of is that it is technology that is driving the changes in the industry and has required new public policy approaches.

The telecommunications industry is finally reaching the point where participants can envision the end of a transition from an industry dominated by a monopoly supplier of equipment and services to an industry marked by competition at almost every level. This transition has necessitated vast changes in industry and corporate structures and in regulatory and pricing policies. The result of this competition is that consumers have available to them today a broad array of innovative products and services at lower prices. The pace of development of competitive alternatives should accelerate in the future.

Any period of uncertainty will, of course, generate fears about the eventual outcome. The impending Bell System divestiture was greeted with wide-spread predictions of huge increases in local telephone rates and large numbers of customers dropping off the network. This, of course, has not happened and need not happen if regulatory commissions continue to exercise their authority to ensure that rate increases actually granted are reasonable.

A major policy change affecting the long distance industry has come from the Federal Communications Commission's access charge proceeding. After several years of study and with the active participation of all interested parties, the FCC has decided to authorize a charge of no more than six dollars per month per line for multi-line business customers. The FCC is currently conducting further proceedings on whether and how to impose such charges on single line business and residential customers.

The FCC was driven by several policy considerations in reaching its conclusions, but chief among them was the preservation of universal, affordable telephone service for all customers. It determined that the economically irrational loading of fixed plant, the so-called non-traffic sensitive costs on long distance service could not be maintained without creating real incentives for some major customers to find alternatives to using local telephone company facilities. The purpose of these charges is to reduce or eliminate such perverse incentives by having the price of each telecommunications service more accurately reflect underlying costs.

Indeed, the Court of Appeals in upholding the FCC's access charge plan stated:

> "The end user charge reflects costs caused not by a subscriber's actually making interstate calls, but by the subscriber's connection into the interstate network, which enables the subscriber to make interstate calls. The same loop that connects a telephone subscriber to the local exchange necessarily connects that subscriber into the interstate network as well. Local telephone costs are real; they are necessarily incurred for each subscriber by virtue of that subscriber's interconnection into the local network, and they must be recovered regardless of how many or how few interstate calls (or local calls for that matter) a subscriber makes."

MCI believes that the FCC's plan is a reasonable solution to a very complex problem and should be implemented.

As mentioned above, the FCC has exempted for now residential and single line business customers from the access charge. The National Federation of Independent Business petitioned the FCC for a further exemption for businesses with six or fewer lines, citing the economic impact of the charge and the fact that NFIB members make relatively few interstate calls.

We believe that the NFIB misunderstands the purpose of the access charge plan and the benefits flowing therefrom.

First, as noted in the quote from the Court above, there simply is no connection between the number of calls made by a customer and the costs imposed by serving that customer.

Virtually all participants in the access charge proceeding -- a proceeding remarkable for its length, complexity and breadth of participation -- agree that the current system cannot be maintained over the long term. As the International Communications Association -- the trade association for corporate telecommunications managers -- noted in its comments on the NFIB petition:

> A customer who in a given month makes few interstate toll calls (or for that matter makes no calls at all) has nonetheless by its very presence on the network consumed one month's worth of subscriber loop and related telephone plant. In these circumstances, it is economically justifiable for end users -- and certainly for NFIB members -- to pay a fixed monthly rate that reflects the fixed costs associated with this subscriber plant."

The access charge plan is the most efficient and equitable way to move towards cost-based pricing.

Second, while the FCC has authorized a charge of up to six dollars per line per month, in fewer than half the states were rates of that amount actually filed. In fact, the FCC estimates the average to be $4.80 to $5.00 with a range from a low of $2.24 in Indiana up to the full $6.00. This would mean that a business with six lines would pay from $13.44 to $36.00 per month depending on the state. More than 80 percent of the respondents to the NFIB survey reported three lines or less and so would pay less than $18 per month. And, I suspect that these increases are offset by toll reductions for many, if not most, small businesses.

In summary, MCI does not believe that the access charge plan will have an adverse effect on small businesses. The benefits of the plan in the preservation of universal, affordable service and the reduction of long distance rates far outweigh the costs.

TESTIMONY OF WILLIAM W. BETTERIDGE, CORPORATE VICE PRESIDENT FOR INDUSTRY MATTERS, AMERICAN TELEPHONE & TELEGRAPH CO.

Mr. **Betteridge**. Thank you. I'm Bill Betteridge, corporate vice president of AT&T.

Mr. Chairman, I would like to abbreviate my remarks and I assume that my statement will be entered in the record.

Mr. **Wyden**. It will be done.

Mr. **Betteridge**. Thank you.

The task force by holding these hearings has been demonstrating its concerns and we think that's good because the concern is one of what is taking place in the telecommunications marketplace. So the question is how do we understand what is taking place and what do we do about it? That's, of course, what you're at work trying to do.

One of the things that's on the top of the heap is the area of change in the implementation of the system of customer line charges that the FCC has mandated. So just to comment on that, I think it's very clear that the old system of pricing telephone service which was developed under regulation, in a monopoly environment, is simply not workable with competition.

There is widespread agreement that change is inevitable and that the problem must be addressed now because the things are being placed now that are going to affect the future.

The previous system of financial flows between telephone services to achieve social purposes I don't think is largely sustainable. There are elements of it that may be sustainable, but to a large extent it isn't; so the question is: "How are we going to achieve some of these same objectives?"

Competition in telecommunications which has evolved as a national policy, as we see it, inevitably means that prices for various services are driven toward costs because the marketplace pushes you that way. That's one of the things that we're seeing in our business all the time these days.

These inevitable changes in prices which are both upward and downward obviously mean increases in charges for some users and decreases to others. As these price adjustments are made, some small business users, to take one segment, will realize immediate direct benefits because there are some that are going to have direct benefits, while others will see relatively small increases in charges that are intended to be spread over time.

In the long term—I'm talking about the total process now—realizing the benefits of the competitive system and the competitive prices which will benefit all users and society and the economy in general I think is what the congressional process and the Federal process has put underway.

The new interstate customer line charge is one of the principal current items of contention and I think I would like to just comment on the phraseology because it has often been termed "an access charge," which is the term the FCC previously used. I think that term is unfortunately, used in error because it's not a charge that relates to an ongoing cost that relates to usage or access. The charge relates to the underlying cost of local facilities which connect the telephone customer to the network, and these facilities provide both local and long distance service.

When you look at the charge, you find that these monthly costs are fixed. If they're fixed then you have to recover them in some fashion that relates to that fact or in a competitive world if you don't, you have distortions that are really is one of the main troubles.

For example, if a customer does not make toll calls or makes very few, this is all the more reason why one needs to recognize that a cost is there, whether or not they make those calls. Of course under the old system, a large part of the low usage customers' costs have been paid for by the large users.

The FCC's approach to fixing or working on this problem does not single out small business. I think the FCC approach is it's one of continued data gathering and analysis and examination of proposed alternatives to these charges. There are underway doing that.

Granted, the FCC has instituted one aspect of the charges. When you take a look at what others have done, like the Congressional Budget Office study or the Joint Economic Committee study, you find in these studies that they say: "yes, this FCC approach is reasonable but there are ways that you the FCC ought to deal with the effects to ameliorate the impacts on users and, in particular, the impacts that might affect how many users are connected to the network—what has been generally termed universal service."

In general these studies indicate that there will be changes in pricing and problems in transition. This is not just true of the FCC but all the studies that have been made.

In addition, others such as NARUC, and the state public service commissions, as we heard, are proposing alternative ways of handling the changes.

The essence of all this is that changes are needed. It is recognized they are needed and so the question of alternatives is the one that your committee properly is addressing.

Now just to make a comment which I'll close on, and to summarize what I think are some of the aspects that the FCC is trying to do and the benefits they're trying to achieve. First, they have recognized that with the shift of costs to end users on a direct basis should permit lower prices for long distance calls. The FCC has already introduced this concept because they directed that a 6.1-percent reduction be made in long distance and WATS services. These reductions, of course, benefit some.

The "access charge" which again is not the correct term, rather the "customer line charge" to recognize what it relates to, does increase the cost for others who don't use the line for long distance as much. So the consequence for some is, in fact, an increase in charges.

I think all of this goes to the point at which the FCC is really aiming. If you don't deter uneconomic bypass by heavy toll users you're going to have a spiral of increasing rates to the remaining users, the people that continue to use that network on a call-by-call basis. These remaining users include small businesses and residences who don't have sufficient volume to use bypass alternatives. That's what the FCC is concerned with, how these changes and the resulting spiral will affect these users down the road. I think that's their concern. It's a change that takes place over time. That's what they're trying to aim at and you can say; "well, they're not taking care of it immediately". I'll have to say the FCC is trying to avoid this by past consequences so that you don't have something that's irreversible down the road. That, to me, is the principal thing that one needs to emphasize, that the FCC has as their intent to, in fact, take care of, to the best of their ability, the remaining mass of users that continue to use the public switched network and public switched services.

On that note, I think I would like to close.

[Mr. Betteridge's prepared statement follows:]

PREPARED STATEMENT OF WILLIAM W. BETTERIDGE, CORPORATE VICE PRESIDENT FOR INDUSTRY MATTERS, AMERICAN TELEPHONE & TELEGRAPH CO.

Mr. Chairman and members of the Telephone Task Force, I am William W. Betteridge. I am a Corporate Vice President of AT&T and have worked for many years on the relationship between prices and costs in the telephone industry. I welcome this opportunity to present our views.

Small Businesses and Telecommunications

The Task Force, by holding these hearings, is demonstrating its concern about the numerous changes taking place in the telecommunications industry and the need to better understand the relationships of these changes in relation to the needs and characteristics of small businesses. One area of change is the implementation of the system of customer line charges under the Federal Communications Commission's orders. AT&T, operating in a competitive marketplace, is also concerned about the needs of all of its customers, including the very substantial number of our small business customers. We have every incentive to give quality service at affordable prices to all of our customers, and to do everything within our ability to make certain that customers are able to adapt to the changes brought about by the new competitive environment, rapidly changing technology and the new structure of the telecommunications industry.

Through creative and innovative uses of the telephone network and products and services tailor-made for the small business customer, AT&T has a lot to offer. It is good business for us, as well as for our customers, to develop telecommunications alternatives for customers to reduce their costs, improve productivity and expand their marketing opportunities.

By any measure, telephone service has been a bargain over the years, particularly in relation to virtually every other category of business costs. It is our business objective to see that that continues.

It is very clear that the old system of pricing telephone service, which was developed under regulation, in a monopoly environment, is simply not workable with competition. There is widespread agreement that change is inevitable and that the problem must be addressed now. The previous system of financial flows between telephone services to achieve social purposes is no longer supportable; although government, society, and industry should properly be concerned that the problems of transition be handled without undue hardships on any customer. Competition in telecommunications, which has evolved over years of Washington debate as a national policy, inevitably means that prices for various services will be driven toward costs. These inevitable changes in prices, upwards and downwards, will obviously mean increases in charges to some users and decreases to others. As price adjustments are made, some small business users will realize immediate, direct benefits while others will see small increases in charges, which should be phased in so as not to be an undue burden. In the long term, realizing the benefits of the competitive system and competitive prices will benefit all users and society and the economy in general.

The new interstate customer line charge is one of the principal current items of contention. By the way, the term "access charge" (the term the FCC previously used) has been misused and misunderstood. The costs underlying this charge are those of local facilities connecting the telephone customer with the local telephone company switching office, providing the connection to both local and long distance service. The monthly costs of this customer line are fixed but in the past they have been recovered in large part by charges for long distance usage. If a customer does not make toll calls, or makes very few, this is all the more reason why these fixed costs should be recovered in some other way than through long distance charges. Under the old system a large part of low usage customers' costs has been paid by the heavy toll users.

The FCC's approach to correcting this problem does not single out small business. It applies the same charge treatment to all business, except for single line business (i.e., business accounts with a single line at a location). Like the House of Representatives last fall, the FCC decided that the customer line charge for single line business service should be deferred, along with the charge for residence service.

The FCC's approach is one of continuing data gathering and analysis. The FCC is examining proposed alternatives to customer line charges in continuing proceedings. The Congressional Budget Office study and the Joint Economic Committee study, among others, have considered alternatives. In general, they recognize that there will be changes in pricing and problems in transition. And others, including state public utility commissions, are proposing alternative ways of handling the necessary changes.

The current FCC plan instituted a new customer line charge for multi-line business service. This monthly charge varies by state from $2.85 to a maximum of $6, averaging $4.89 per month per line. The charge for single line business and for residence has been deferred by the FCC. Naturally no customer welcomes any increase in charges but we believe the changes are supportable and that $4.89 or even $6 is reasonable in comparison with other costs and increases in costs.

Most important, as a result of the FCC plan, small businesses as well as large will see some substantial benefits which I would like to discuss in more detail.

First, the establishment of monthly customer line charges will be accompanied by lower prices for interstate long distance calls. A 6.1% reduction is already in effect for long distance and WATS services. For many small business customers, these lower prices will more than offset the monthly customer line charge. For example, small advertising agencies and consulting engineering firms typically have substantial long distance usage and will benefit from the reduction in intercity prices.

Second, deterring uneconomic bypass by heavy toll users will prevent a spiral of increasing rates to the remaining users. These remaining users include small businesses who do not have sufficient volume to use bypass alternatives, or to justify high volume services like WATS or private line. Thus, prevention of bypass is especially important to small business users.

Third, the lower long distance prices and innovative competitive offerings by AT&T and other competitors will stimulate usage, resulting in lower unit costs and still lower rates. These lower rates will be reflected in lower prices throughout the economy, benefiting everyone.

In short, we must remember that there are no new revenues for the exchange carriers or for AT&T as a result of these customer line charges. The charges merely replace charges formerly included as a part of other charges and which had the major detrimental effect of inhibiting long distance calling. Although the charges are now more obvious, and there is some redistribution among customers, the overall effect is beneficial.

Lower Long-Distance Prices

Direct recovery by the exchange carriers of more of the fixed customer line costs means lower charges to the interexchange carriers for recovery from their customers in long distance rates. This means lower long distance prices. The introduction of customer line charges for multi-line business was accompanied by a 6.1% reduction in interstate toll rates to all customers, business and residence. Introduction of customer line charges for residence and single line business would make possible a further reduction in long distance prices for all users.

Small businesses with a single line (about 39% of the small businesses responding in the recent National Federation of Independent Business survey) already have achieved a 6.1% reduction in interstate toll charges, even before introduction of a monthly customer line charge for them. Introduction in 1985 of a customer line charge, accompanied by a further reduction in long distance prices, would leave many such customers still better off on balance.

For customers with more than one line per location, the immediate 6.1% price decrease means that a customer with $80 per month or more in interstate toll charges per line would see a decrease in his long distance bill equal to or greater than the average monthly line charge of $4.89. The introduction of residence and single line business charges would make further toll rate reductions possible, reducing this threshold still more.

In addition to these price decreases, AT&T is offering service plans to meet the particular needs of various classes of customers, such as small businesses who may not have sufficient call volumes to warrant subscribing to WATS. AT&T has filed intrastate pricing plans in West Virginia, California, and Wisconsin which are designed to lower the costs of long distance service to small businesses. For example, PRO-West Virginia, an optional plan which has been approved by the state commission, features a flat monthly charge of $10 per main billed number at a location, for which the customer receives a 15% discount on all directly dialed intrastate long distance charges. AT&T is considering similar plans in other jurisdictions. Such plans can help customers further offset the effects of a monthly customer line charge and also allow customers to use telecommunications for the economical solution of their business problems.

Lower long distance prices and optional plans will stimulate additional usage, encourage the introduction of new facilities and new technology, and lead to lower unit costs and lower prices. This in turn will benefit all users, including small businesses.

Deterring Bypass

The threat of bypass is not just a hobgoblin. It is real and immediate. The technology and economic motivation are already here. One cannot blame heavy users of long distance for trying to save money. Traditional pricing has loaded substantial amounts of fixed line costs (costs which do not depend on call volumes) into toll rates on a usage sensitive (per minute) basis. You have seen and heard statistics (including those cited by the NFIB) which show that a relatively small number of customers generate a very large part of the long distance business. Such customers may have been paying, through toll rates, many times the cost of their own lines, in some cases 100 times cost or more. This enabled monthly local exchange rates to be kept down for the large body of customers. Customers making few or no long distance calls have not been paying the full cost of their own lines. This conscious, intended social policy kept exchange rates down. However, the ready availability of bypass technology and willing competitive suppliers now gives those large users a choice and means the present financial flows for support cannot long continue. Even if bypass costs more than the true economic cost of a line, the heavy user can bypass and save money by avoiding the large amount of support for other services included in long distance prices. When bypass takes place, the costs of the plant which has been bypassed must be borne by the remaining body of customers. This leads to higher local and long distance exchange rates, which in turn means a further spiral of bypass. Once a customer bypasses, it has usually made a long term investment or a long term commitment to a bypass supplier, a decision which for all practical purposes is irrevocable.

Bypass really cannot be prevented except by revisions in prices. Customers who make no long distance calls, or just a few, would naturally prefer to continue to receive support toward the cost of their lines. However, the growth of bypass would mean more than just the loss of the support. Many small business customers (and of course most residence customers) would be among those unable to benefit through some bypass arrangement, as in some cases their competitors would. The customers remaining would be saddled with additional fixed costs of the plant which was bypassed and thus would be compelled to pay still higher rates, further adversely affecting the business customers' ability to compete with those who had bypassed.

Moreover, the presence on the network of large volume customers is a powerful incentive to the carriers to innovate, install the latest technology, etc. As significant amounts of telecommunications traffic leave the network, this incentive is diminished -- and the ability to finance improvements in service also is diminished.

In Docket 78-72, the FCC is making additional studies of bypass and has received data from many parties. However, it is clear that many large customers are moving to bypass and many more will do so if pricing is not related more closely to cost.

Long Range Benefits

Pricing more in accord with economic costs will yield substantial benefits in future years.

A recent study by Wharton Econometric Forecasting Associates found that the FCC plan would benefit both residential and business users. It would result in long distance price reductions and foster more vigorous competition in the long distance market. It would give a boost to the U. S. economy over the next five years, resulting in a $46 billion increase in the gross national product, 400,000 new jobs, a 1% reduction in the overall level of prices, and a $21.5 billion reduction in the federal debt. It would also have a favorable effect on the U. S. balance of international trade. Some means of subsidizing lifeline service to low income individuals may be required, but the gains to the economy far exceed the cost of a targeted lifeline subsidy.

Small businesses would share substantially in these benefits, and this would not be the only direct benefit of substantially lower long distance prices. The reductions in toll rates would result in lower costs for their suppliers and thus in lower prices charged by those suppliers.

You are probably also familiar with the recent Congressional Budget Office study which discusses the greater efficiency which can be gained by pricing more closely related to costs.

The National Telecommunications and Information Administration (NTIA) also concluded recently that the present system of loading non-traffic sensitive costs into toll rates is inefficient and causes substantial losses to the national economy. Because of high prices, some users avoid making long distance calls for which they would be willing to pay the actual costs. Removing NTS costs would allow prices to move toward marginal costs, stimulate additional usage, and realize substantial economic gains.

Direct Costs to Small Businesses

Certainly, the immediate effect on those small businesses which make no long distance calls whatsoever, or very few calls, will be an increase in aggregate communications costs. In any repricing which is the inevitable result of competition some increases and some decreases will occur.

As pointed out earlier, a substantial number of small businesses (about 39% of the NFIB responses) are single line customers who have no immediate customer line charge, but benefit now from the interstate price reductions.

Customers with two or three lines (a further 43% of respondents in the NFIB survey) would pay an average of $4.89 per month per line. The immediate 6.1% toll rate reduction means that a customer with $80 per month or more in interstate toll charges per line would achieve a reduction equal to or greater than the monthly service charge. If customer line charges for residence and single line business are introduced in 1985, accompanied by additional reductions in toll rates, this break even point will become even lower.

I suggest some other ways to put the monthly customer line charge in context. The federal minimum wage is now $3.35 per hour (in some states, even higher), to which must be added social security and unemployment taxes, workmen's compensation insurance, any benefits (e.g., holiday, vacation, or sick pay, any medical insurance, etc.). The typical loaded rate at the minimum wage for just one employee hour surely approaches or exceeds the $4.89 average monthly customer line charge.

Even for a business making no long distance calls, the increase is not substantial, both in absolute terms and as a percentage, when compared with other cost changes which small businesses have undergone and which they recognize have resulted from the operation of the economy, competition, inflation, etc. Businesses have adapted to very substantial changes in costs of heat, utilities, motor fuel, taxes, rent, etc. They have adjusted their operations and prices as necessary. They do not expect subsidies as a means of meeting cost changes.

Looked at another way, for most small businesses, as for business in general, total telecommunications costs are a very small fraction of total costs, ranging from a fraction of one percent for certain types of businesses to a few percent for others. Businesses using appreciable amounts of long distance service benefit from any toll price reductions.

Thus, the fractional increase in charges to some small businesses does not seem to pose a crisis situation for those businesses. It is not apparent why an annual cost increase of $60 to $360 (for a six-line customer who makes no interstate long distance calls) should be unreasonable in even a very small business.

The fact is that those customers with little or no long distance use have not been paying the full cost of their lines. Thus, increases in charges resulting from reduction of the support flows are not inherently unfair. In fact, the old system is the inequitable one, because many users escaped paying the real economic cost of their service.

AT&T Services to Small Businesses

I want to emphasize AT&T's commitment to its small business customers. Telecommunications services are not an end in themselves but rather a means for businesses to accomplish objectives and solve business problems. AT&T Account Executives try to assist small business customers in meeting these objectives. For example, telecommunications services can be used to meet marketing concerns such as obtaining marketing research information, obtaining pricing information, servicing customer accounts, improving order processing and distribution, more economical sales and servicing, furnishing training information, and disseminating product and promotional information.

Financing applications include use for improved credit information and credit management and account collection.

Telecommunications services also aid in timely purchasing, improved relationships to suppliers' delivery schedules and contract obligations, etc.

Thus, telecommunications expenses are not just an "overhead expense" but a means to improve business performance, earn additional revenues, and save on other costs.

Answers to Committee Questions

Congressman Wyden's letter stated three questions. We believe the above information fully responds to the first question as to our views on end user charges.

As to the second question, we regret that we do not have the type of information requested on effects by size of customer and Standard Industrial Code. Under the previous Bell System structure prior to divestiture, there was no requirement to have information of this nature. There was no separate interstate charge for lines and no necessary correlation between number of customer lines and toll volumes. Under today's industry structure, AT&T has no direct means to determine the number of lines any customer has since these are furnished by the exchange carriers.

As to the third question, various parties including the FCC have considered alternatives, as previously mentioned. The FCC is continuing its investigations of matters such as transition to customer line charges, targeting assistance to the needy, bypass, etc. Others, including the state public utility commissions, are proposing alternatives that recognize the need for change. In any outcome of all these deliberations, we believe it is obvious that pricing must be more in line with economic costs. Society is properly concerned that the truly needy should not be hurt and some narrowly targeted subsidies may be required. However, the general system of cross-service support can no longer be maintained.

Summary

While few people would deny that the transition to a competitive environment in telecommunications is well under way, not everyone is affected the same way, and therefore not everyone wants to accept the results in the way telecommunications services and products will be priced. The financial flows for support which were appropriate in a monopoly environment cannot be sustained in today's competitive marketplace. The FCC has recognized, as have others, that the transition to a structure where prices more closely reflect true costs must be managed carefully to avoid undue hardships on customers. AT&T believes that the FCC's plan is reasonable and will result in long term benefits to the economy and to individual users. On the other hand, if the present system of support pricing is maintained, it will result in large users leaving the network and a spiraling increase in cost for those small businesses and others who may not be able to justify alternative services.

Mr. **Wyden**. Thank you.

We have a vote on the floor and I have a number of questions for each of you gentlemen, so if you'll indulge us just a bit longer, the gentleman from Iowa and I will run over and vote and get back as fast as we can.

[A short recess was taken.]

Mr. **Wyden**. Gentlemen, we apologize for all the back and forth. This is kind of the vexatious nature of the job. We appreciate your patience and I do have a few questions.

First I think I want to focus on this question of subsidies and who is subsidizing whom.

Now my understanding of the way a long distance call is made, if I'm making a call from Portland, OR, or Des Moines, IA, or somewhere, the call is made through a local loop at my end and then to be transmitted to the person who receives the call it goes through a local loop at the other end as well, so to make a long distance call you are inextricably linked with the local loop, with the local services and the local operators.

The real question then becomes what is the real cost of doing business for long-distance people who want to use the services of people who are running the local telephone services. Mr. Snedaker used what is generally the consensus kind of figure, the $11 billion is considered to be the subsidy.

Very frankly, I and some of my colleagues on the Commerce Committee, and I suspect on the task force, think that a lot of what you gentlemen might consider a subsidy, we call the cost of doing business, the cost of doing business in America.

It seems to me that if those local loops were not there, you all would have to build those facilities because otherwise you couldn't make long-distance calls in this country.

My first question, and I throw it at any of you gentlemen who choose to run with it, how much do you think that the long distance companies ought to pay—$5 billion, $6 billion, $3 billion, $2 billion?

Mr. Snedaker used what is the consensus kind of figure $11 billion subsidy. I know that I used to give a lot of speeches over the years and talk about how we ought to cut it in half because the long distance people were paying more than they should back to local people, and everybody clapped like crazy. They thought that was just wonderful.

I wasn't very popular when the FCC came along and said that essentially that sum would be zero or close to zero.

I guess my first question to you is how much do you think is a fair amount that long distance companies ought to pay back to local facilities for the cost of these jointly used facilities without which long distance calls couldn't be made?

Mr. **Snedaker**. Mr. Chairman, may I start?

I think a direct answer, and you may say it's not a direct answer, is equal to the amount of the Universal Service Fund, whatever that figure is, and I'm not sure what that figure is yet. It could be $900 million and it could be $1.2 billion, but that's not really what you're asking.

You're saying the local loop is used about 17 percent of the time for long distance and the rest for local and therefore shouldn't it be shared that way, and that's basically the thrust of your point.

Believe, me that particular point has been debated at length, as you pointed out, by us in the industry.

When this whole issue which was debated in FDD Docket 78-72 came up, pure two, pure one, mixed two, mixed one, we were all shaking our heads. We were asking the same questions you are and were and I think it's appropriate that we reexamine it.

The one thing that starts to become obvious, you mentioned the long distance companies building their own local loop and that's exactly what we're worried about.

Mr. WYDEN. Well, you would have to.

Mr. SNEDAKER. Correct.

Mr. WYDEN. If the local people weren't there you all would have to go out and do it.

Mr. SNEDAKER. They're doing it now, the major customers. The major companies are building their own local loop.

Let's take New York City, Manhattan Cablevision. That bypasses the local loop. It goes to the teleport, let's say. The satellite, it's all bypassing the local loop and what we're concerned about, to keep the rates down for the small business customers and the residential customers is to keep them on the local loop now.

Mr. WYDEN. I'm going to ask you about bypass in a minute, but I first want to——

Mr. SNEDAKER. But it's inextricably commingled in my opinion. Bypass and the issue we're talking about, keeping the cost down, are——

Mr. WYDEN. I think that it is fine to say that they are inextricably linked, bypass and keeping the cost down, but what I first want to get at is what is a fair contribution for these jointly used facilities, without which you would have to go out and build them yourself?

I think it gets to the point that came up in this debate that you all feel you ought to pay for traffic sensitive kinds of costs but not for nontraffic sensitive aspects of the system, and if we didn't have that system you all would have to go out and build it yourself. So I want to stay with this question and have you tell me what you think the fair contribution would be from the long distance people back to the local and base your figure on your own views about this.

Mr. SNEDAKER. We do have two different groups here. Mr. Smith and I represent the local exchange companies, the telephone companies, and you have two other gentlemen here that represent, as you know, the intercity carriers.

Mr. WYDEN. I threw it open to anybody. If you're inclined, we can give it to AT&T.

Mr. SNEDAKER. I would just reiterate what I said before. I think that the fact that the local loop is there regardless of whether you make a hundred calls, receive a hundred calls, make zero calls, receive zero calls, that cost has to move back that way except for the Universal Service Fund, and maybe the Universal Service Fund should be $3.3 billion which would be equal to SLU.

I'm not sure of the answer. Maybe it should be one billion. Maybe it should be 3.3, and I think that's something that the industry is attempting to and certainly as soon as we have the information available we will certainly bring it to the committee.

This is something that the local telephone companies are trying to come up with—what is the right cost to maintain universal service.

Mr. WYDEN. Let's ask AT&T. What's a fair cost?

Mr. BETTERIDGE. The answer as I see it is one that isn't being answered the way that I think you're asking the question because fairness in this competitive world is not defined by what you and I might say is equitable in the kind of philosophical sense.

It is going to be determined by the marketplace because it's the alternatives in the marketplace that are going to——

Mr. WYDEN. All the long distance companies under the competitive world would have to pay something back to the locals.

Mr. BETTERIDGE. One could mandate a tax-like process like any process that's mandated by government. But, the real question of how much the long-distance companies are going to pay is going to be a question of what are the alternatives in the marketplace—what other ways you can do it, so that the local company in terms of their having a line that's in place, that's been paid for, and which is used not just for intercity but is used for local—the question then is how much of that line can be paid for, transferred, whatever term you want to use, handled by the intercity piece and the answer is going to be what's the alternative between what the local companies charge, which you might say is the fair price. And what others can do it for. If what others can do it for, and particularly for these larger customers, is lower, fairness is an abstract thing that won't take place.

Mr. WYDEN. I think you're missing the point. We're going to charge everybody in the long distance business a cost to get back to the local system because it's the cost of doing business, so this has nothing to do with AT&T against MCI.

This is a question of what we're going to ask every long distance company in this country to pay as the cost of doing business because nobody in business gets something for nothing and it seems to me unless long distance companies, all of them, no use talking about disadvantaging AT&T unless all of them pay something back to the local companies, it doesn't seem to me we're going to have a fair system.

Mr. BETTERIDGE. Whether it's AT&T or any of the other suppliers, there is still going to be a question of what are the other alternatives.

If the customers, as they're doing today, say, "Hey, I don't want you to use the local company, I want to build to you." This is a customer talking to us as a carrier saying, "I want to build to you because I can do it cheaper and I want to connect with you at your location, not have you come to my location. That's the sort of alternative that's being asked for in the marketplace.

Mr. WYDEN. I think the point is again that you want to tailor all of your services and all of your charges to these handful of people that are going to have the lucrative possibilities for your business. What we're talking about is running a system that's in the national interest for everybody and that means that those who use services and use the system would pay for it.

I think that's what has been at issue all along. All of you have built this house of cards, and I use that specifically, around this bogeyman called bypass and I think bypass is a problem, I'm not saying it's not, but I tell you it's not difficult, in my view to deal with bypass.

I think we are going to find it easier to deal with the bypassers than we are to set up the kind of two-class phone system that you gentlemen are basically advocating today.

I was director of the senior citizens group for a long time and I can tell you that a two-class phone system is going to be a mess. We are not going to be able to get the assistance to those who need it.

I know we've had talk of phone stamps and various other things. We face two tough choices. We can try and deal with the bypassers and the FCC has put out some proposals already for dealing with that knotty problem, or we can go out and try to do the impossible and that is to set up a two-class phone system in this country and I think we'll be making a great mistake if we don't do that.

Mr. SNEDAKER. Mr. Chairman, what do you do about the State of Oregon and the example that was brought up this morning?

Here is a State government that is building a system that is going to bypass the local network and not use it to save over $1 million per year. What do we do about that?

Mr. WYDEN. What we're going to do is very much like we did with the House-passed legislation this year and that is to force bypassers to pay a charge for getting into the system. We know that in most instances they're tying into the local switchboards and local services.

That's a classic case, a pretty simple case. The bypasser, gentlemen, frankly who concerns me, and I think you, too, are the ones we really don't know about, the ones that are out there that are engaged in these complex technological kind of developments. But the State of Oregon, if they bypass under the House-passed legislation, it's going to be a fairly straightforward issue for us to deal with and they're going to pay a fee for doing it.

Mr. BETTERIDGE. You would like an absolute answer in some fashion, $1 billion or $10 billion.

Mr. WYDEN. Anything.

Mr. BETTERIDGE. You want an absolute answer and my comment to you is that you are picking that absolute answer out of your equity concept. But, the answer has got to relate to the marketplace. It isn't something that you can just pick out because you think it's fair, because the marketplace will then tell you whether it's fair or not.

Mr. WYDEN. I very obviously didn't pick anything out. I asked you because you gentlemen have been calling this a subsidy from day one. What part of it is the cost of doing business, because we went through the specifics of how a phone call gets made in this country and you all are using all these services for which I don't see any evidence anybody really wants to pay.

Mr. **Betteridge**. My answer to you is that the cost of doing business is the price of the alternative to us. The cost of the alternative is the cost of doing business.

Mr. **Wyden**. I accept that answer and respectfully disagree and that's what the debate is all about.

The debate is, in my view, if you use something in this country you ought to pay for it and you ought to pay fairly just like any other business, and to say that the cost ought to be the alternative based on this bogeyman of bypass and dealing with a handful of people and their needs in this country and throwing everybody else's aside is in my view a mistake.

I want to ask just one other question and then I'm going to turn to my colleague from Iowa.

I want to get into this question of nontraffic sensitive costs with you gentlemen. Let me just state what the concern is among small business people; some in the industry are in effect trying to stick on the users fixed costs that no other business in this country could call fixed costs. I want to start by asking whether you believe that marketing or managerial or labor costs are part of nontraffic sensitive costs in this country?

Mr. **Snedaker**. Well, the nontraffic sensitive costs as I understand it, is the cost of that investment that goes from the wire in the home to the cable that connects to the central office and the costs associated with that, and that is nontraffic sensitive as we've been over before.

Now associated with that are the costs of maintaining it, the profit, the depreciation, all the parts that are properly assigned to that.

Now you might argue why marketing would be included and I would have to think about that. I don't know.

Mr. **Wyden**. Mr. Snedaker, I am particularly interested in how we get from $15 billion in total depreciation taken in 1981 for all communications assets, including assets relating to long distance interstate, to $44 billion in nontraffic sensitive costs.

How do we get to that figure, and the concern I hear from businesses is in essence, as I said, that they think that users are getting stuck with these fixed costs that no other businesses would get stuck with.

Mr. **Snedaker**. I think the answer there, Mr. Chairman, is that we have to look at the $15 billion and I think by any measure or standard that the regulatory authorities dealing with that have said that those old rates were too low and that they should be at a higher level, which they are now.

Of course, you have the new plant going in, too. We can't ignore the fact that we built a new plant in the meantime.

The main thing is to attempt to get the current ratepayers to pay rather than the future children to pay for our expenses. The thinking there is that we should pay for our own expenses, why should our children have to pay 5 or 10 years from now for what we're using now.

I think basically that would be my answer.

Mr. **Wyden**. What, in addition to fixed depreciable investment, is included in nontraffic sensitive costs?

Why don't each one of you just break that down for me.

Mr. **Snedaker**. I think we could start with the system of accounts. You could go down every single particular, you have an allocation made to every one. You have commercial. I don't think you have traffic, that's all assigned to traffic sensitive. You would have some engineering costs, for sure. You would have overhead costs. You would have the supervision in charge of the maintenance side, and you would go on down every single line of expenses that you go down on your expense statement and *x* percent of that would be allocated to that nontraffic sensitive piece of plant.

Mr. **Betterridge**. The local—it seems to me that you have the cost of putting in the capability, the wires, the cable, whatever it is, the costs, there are costs that you have whether it be digging a trench in the ground or building poles to hang it on or what have you, it's the cost of placing the investment; and then the maintenance of that investment so it works. That's essentially what the nontraffic sensitive costs are between the location that the customer has where he wants to use it and the central office of the local company.

Mr. **Wyden**. Mr. Smith.

Mr. **Smith**. Mr. Chairman, I would just comment that in our State we are required by our regulatory commission to include the overhead that you mentioned. I think you'll find that that's a requirement that the State may or may not levy upon the company as they see fit.

As far as we're concerned, I can give you the numbers of the nontraffic sensitive, and I would be glad to give you an analysis of that later, but I do have the numbers. Really the biggest chunk of it is the loop cost.

Mr. **Wyden**. That would be very helpful, because if we are going to fairly allocate our costs in this complex system, we have to know how you break down your nontraffic sensitive and traffic sensitive costs. We will hold the record open on that point and if you could furnish that in writing, that would be helpful.

Mr. Eidenberg, did you want to comment on that?

Mr. **Eidenberg**. Mr. Chairman, I would appreciate the opportunity, not to comment on this last point which clearly is well within the competence of the local telephone company and I couldn't add to Mr. Smith's comments.

I do want to make a related comment, however, on the first issue you raised, which was the question of what should be the interexchange industry's fair share of these costs, whatever they turn out to be.

I want to just underscore once again the point that we're already spending—on a discounted basis, because of the quality of the access we get—$330 a month for every line we use and that will jump to were than $600 a month when we get equal access.

We are paying the local telephone company for the facilities we use to complete long distance calls. We are paying them a substantial amount of money for that.

The second point I want to make is if you want to define the cost of doing business, which is the way I heard you coming at the issue, the fair amount is what it actually costs to provide the facility for the purposes for which it's used.

Then, if after you have allocated that genuine cost—the cost of doing business to use your phrase—there are unmet social needs, there are people who live in rural areas, high cost areas, or low income people who if faced with those real costs would not be able to make use of what we all agree is an absolute necessity, basic telephone service, then we ought to figure out ways to provide direct support for those people to continue to have access to the local telephone system.

In no way should we let the fundamental and economic allocation of costs of doing business drive people off the network, and we don't have to. Public policy can deal with the issue.

My objection, and speaking for our industry, our objection is to turning the interexchange business into the beast of burden for whole classes of people, some of whom can afford and some of whom cannot afford the cost of telephone service.

Small business by definition is not without the capability of meeting its fair share of those costs, either, and it is precisely that notion of wholesale classifications of sets of citizens who, by virtue of a line of professional activity, are going to be protected from paying their fair share of the costs that is what we would object to.

Between those two positions, there ought to be——

Mr. **Wyden**. No one has ever heard Ron Wyden come out against paying your fair share. I think what we heard from the small business people today is they don't think it's very fair to be singled out alone for a disproportionate share of the burden and everybody else has been exempted from access charges and two-, three-, and four-line small businesses, thousands of them, are going to get these new costs heaped on them and all the attendant costs that flow from that.

Mr. **Eidenberg**. Nobody should be singled out. Nobody should be treated discriminatorily—and the 1934 Communications Act prohibits it and I agree with that sentiment. I don't believe the FCC's logic in its order has that kind of built-in discrimination.

Mr. **Wyden**. I will just say, so we all hear it again, when we went to the "supply side" telephone service, in my view we just put the 1934 act and the commitment to universal service on the shelf. I think we're dealing with a very different approach today.

Mr. **Snedaker**. Mr. Chairman, may I just bring up one point? I think there's one point we're overlooking.

There has been a subsidy in this business for a long time between business and residents for like service, the exact identical dial tone service. Business customers paid two and a half times as much as residential customers.

Now we know that they have a tax break but here you have right now today in the examples, Mr. Bernard's phone business rate is $40. If he could get residential he would pay substantially less than that, so we have another subsidy that's been built into the system over the years. If that were eliminated, it would help business dramatically.

Mr. **Wyden**. Again we go back into playing one group off against another, business and residences, and I think what I would like to see and what would be helpful to the task force is that if you could give us some idea of your nontraffic sensitive costs in writing, and I gather for some of you that's fairly easy, and in addition to that how much you make off that process. I think that would help us to get some meaning out of the figures.

I may have some other questions but I want to let the gentleman from Iowa who is very interested in these issues ask his questions.

Mr. **Bedell**. Thank you, Mr. Chairman.

We're really trying to find answers here. You may think we're prejudiced as we come to the meeting, but we're trying to find answers.

Mr. Smith, you indicated that you've lost revenue because of bypass. Will you explain to me how that occurs?

Mr. **Smith**. Well, for example, Mr. Bedell, I'll just give you one example. John Deere in eastern Iowa connected their plants with a private network, bypassing our local network and also our interlata toll, and they have their own private telephone system, if you will, and that basically has cost us about $1 million a year in revenue by them no longer being billed for the services that they now provide for themselves.

Mr. **Bedell**. That's what I need to understand. If they now make a telephone call from their office in Iowa to somebody in Texas, do you get the revenues off of that call?

Mr. **Smith**. We would get the local revenues and part of the long distance, but what they've done is to build a system that connects their plants in Iowa so that there is a dish on one building and then they go to another building and they completely bypass our network totally in that.

Mr. **Bedell**. I understand that, but I thought the revenue from that call from their office in Iowa to Texas, that long distance call, was revenue that went to AT&T through their long distance interchange. Did I not understand that correctly?

Mr. **Smith**. That's correct.

Mr. **Bedell**. And did AT&T pay you some money then because of that call? Is that what you lost?

Mr. **Smith**. That's what we lost in that example that you're talking about.

Mr. **Bedell**. I don't think anybody would feel you should lose that, at least I would not.

Where I have the trouble with all this, and you can correct me if I'm wrong, if I were publishing a magazine, certainly I would sell that magazine for less than it costs me to publish it because I would get my revenue from the advertisers. I would have to get the magazine out in order to get the revenue from the advertisers. The same thing would be true for a newspaper.

I assume that was previously true for AT&T that you were subsidizing the local users because you needed to have phones in those different places in order for people to make these long distance calls.

I assume that's correct. I think that's common in business and nobody here, is trying to say at least I'm not, that you ought to lose out on that revenue that came to you.

It would seem to me that you should be very, very supportive of efforts to say that what we are going to do in bypass is to charge whoever does the bypassing. We're going to require them to pay the same amount you would have received if AT&T had made the call. That's what we would say should happen.

By doing that, hopefully we can keep the costs where they are for local users and keep that system going. We would not have to worry about bypass being unfair because we would say that the bypassers would have to pay the same as AT&T has to pay to the local system.

Now what's wrong with our thinking on that, because if there's something wrong with it——

Mr. SMITH. Well, I think that Chairman Fowler talked about a couple of points this morning in response to a similar question which I won't go over the same ground, but the other thing I think Mr. Eidenberg——

Mr. BEDELL. You tell me in your words because I don't have any confidence in Mr. Fowler. I'll listen to you if you've got something that makes sense. He didn't make any sense to me.

Mr. SMITH. I understand. The only point I would make is that I am concerned that technologically it will be very difficult to monitor bypass.

Mr. BEDELL. But I don't think that ought to be your worry. If we say we're going to do it, I don't think you ought to worry about how we're going to do it technologically.

I don't understand why you would be opposed to anything if we say what we want to do is pass legislation that's going to guarantee that you will still get the same subsidy that you were getting before. Is there some other reason you're opposed to it?

The thing that bothers me is it seems to me what Mr. Wyden and I are trying to do is trying to help you, too. We're trying to say that rather than for you to have to raise rates to your people or have an access charge, what we think the answer should be is to continue the system similar to the way it's been operating so you won't have to do that.

I can't understand why you folks would not be coming here rah, rah, rah for Mr. Wyden and Mr. Bedell for trying to help you so you don't have to increase the rates to the users.

Do you understand my question?

Mr. SMITH. I understand.

Mr. SNEDAKER. I don't. I would have problems with that.

Mr. BEDELL. That's what I need to know. What is the problem?

Mr. SNEDAKER. Let's take the networks, the TV networks. The TV networks traditionally use leased lines, coaxial cables from the telephone industry. Today they can go up by satellite and come back down and never touch our circuits.

Are we going to say that they should pay a substantial tax—and that would be a lot of money because that's a very broad band circuit—should they pay the telephone company to keep local rates down to the tune of, say, $10,000 a day?

That goes to the point that Chairman Fowler mentioned, that you would not have the technology here today if you taxed it.

Let's take cellular in this country. Cellular isn't exactly the same, but cellular should have been introduced in this country 16 years ago and it wasn't. That's a bad example of regulation.

What I'm suggesting is that if we put the skids on the introduction of technology in this country, we are putting ourselves behind the Japanese and Germans and everybody else.

Mr. **Bedell**. Nobody said anything about putting the skids on the introduction of technology. It appears to me that you've got two systems. In the magazine industry, you've got the sale of the magazine and you've got the sale of advertising. In the telephone services industry it seems to me that you have long distance service and you have local service. It seems to me that the two are comparable.

What we would say is that you should have fair and equal competition in the sale of magazines and you ought to have fair and equal competition in long-distance communications. We ought to say that each of them have to have an equivalent charge in subsidizing the local system so that we keep the local system open and available to everybody just as it always was in the past.

I should think that would be greatly in your interest. I don't know whether you are going to charge for the TV's to communicate directly from one to another or not.

I assume they don't use your system then. Is that correct?

Mr. **Snedaker**. I think you have a good example there. Let's assume you have somebody delivering magazines and I could put into your home videotext cheaper than you can get your magazine and give you all the things you want with a printer and everything else but you tell me that I have to pay *x* amount of money to the magazine to keep the magazine in business because that's the way it was done in the past and I would have trouble with that.

Mr. **Bedell**. In all fairness, I don't think that's comparable at all. Do you agree that we have to have a telephone system across the country for all of our society?

Mr. **Snedaker**. Yes, absolutely.

Mr. **Bedell**. Then if that's what we want, then it seems to me there probably is going to be somewhat of a monopoly. I don't see how you can expect to have a great deal of competition in who is furnishing the present technology to serve it.

It seems to me that apparently long-distance transmission has become, because of technology, competitive.

Mr. **Snedaker**. Right.

Mr. **Bedell**. It would seem to me that one could say that in the past only the supplier recognized that in order to supply his service he had to have those telephones in place all the way across the country and he was willing to subsidize the cost in order to see that was there.

It seems to me that we now have competition and it's not wrong for us to say that we're going to continue that subsidy. The only difference is we're going to say that everybody who furnishes that long distance transmission and uses that system is going to have to subsidize it rather than to say we're going to change the system now so that the users have to pay all the costs and the people that are competing for the long distance transmission are going to have to pay only their costs.

Mr. **Snedaker**. I would agree with that, only I would modify it slightly, and you may think I'm going around a different way.

I would say that the people that actually use the local network for long distance should pay for it, but I would limit it to the universal service fund amount, whatever that is and I don't know what that should be, and that would be the subsidy to do just what you say. It will keep people on the network, and I agree that has to be done, and it could be 1 billion or it could be 3 billion or it could be 10 billion.

Mr. **Bedell**. Seems to me that answer is clear. It ought to be comparable to what the subsidy was before.

Mr. **Snedaker**. Or it could be low enough to keep universal service but not too high to drive the high users off, and I think that's the balance.

Mr. **Bedell**. Why should it not be the same as it was before?

Mr. **Snedaker**. Because it's driving the high users off right now, like the State of Oregon, for example.

Mr. **Bedell**. I don't—I'll yield to the gentleman.

Mr. **Snedaker**. Right now it's $11 billion and I think it ought to be about 1 billion.

Mr. **Bedell**. If you say the State of Oregon has to operate so that the charge for long distance, whoever transmitted it, would be comparable to what it had been in the past, I don't see——

Mr. **Wyden**. If the gentleman will yield. We have finally gotten an answer to my first question. Previously we were paying $11 billion from long distance back to local, and you just told my colleague that now it ought to be $1 billion, that $1 billion is the fair cost of doing business.

I just have to tell you that I disagree with you in the strongest possible way.

Mr. **Snedaker**. I would be willing to go up to $3 billion. I don't know the answer.

Mr. **Wyden**. So now we have cut by more than 75 percent instead of 90 percent the cost of doing business for long distance companies. I just have to tell you there is no business that I know of in this country that would be in a similar situation that could get a 75-to-90 percent reduction in the cost of doing business. Nobody would be able to do that.

I want to yield back to the gentleman, but that is right to the heart of the matter, and to say that you ought to pay $1 to $3 billion for something that you previously paid $11 billion for I just think is unacceptable.

Mr. **Snedaker**. The problem I have, you have sitting at this table two of the potentially largest bypassers in the whole United States, right here, and if they bypass, his company [AT&T] pays $17.8 billion a year for use of the local network, and his company [MCI] is paying three times what he paid before, he just told us, and if we drive them off the network or if their customers say we want to hook up direct to your companies [AT&T or MCI] and bypass the telco, I think we have a problem. The small business customers have a problem. The residential customers have a problem.

Mr. **Wyden**. If the gentleman would yield, I'm going to go into bypass on the next round, but I think we need to clear up that there are two kinds of bypassers in this country and you've been talking about them as if they were one.

One of them is the bypasser who doesn't interconnect with the network. We have no concern about that person. We don't want to charge that person.

The second is the bypasser who does connect with the network and we think that that again is a situation where they should pay because it's the cost of doing business.

Mr. **Eidenberg**. Mr. Chairman, could I be permitted an opportunity to comment on this fundamental issue?

Mr. **Bedell**. I don't want to cut anybody off but I do want to say something first because I need to understand it.

Mr. Smith, you're from Iowa and we're friends and all that sort of thing, but what I can't understand is why you would not rather be receiving a subsidy of $11 billion than a subsidy of $1 billion.

I can understand the two gentlemen on the end of his panel not wanting to pay it, but I can't for the life of me understand the two gentlemen in the middle saying we don't want that subsidy so the rates will be lower to our users and so we'll be able to provide more people with telephone service.

That's what I can't understand and, believe me I want to. There must be some reason and I'm not trying to put you on a spot, I hope you know that, but what is the reason?

Mr. **Snedaker**. I have a reason. The reason is, let's take that $11 billion, that's just interstate. Half of that $11 billion comes from business, large businesses that can bypass the network. Now if they do bypass the——

Mr. **Bedell**. They can bypass the network and not use the network?

Mr. **Snedaker**. Yes, they can. Yes, sir. Let's take General Motors. General Motors is bypassing the local network and only talking to other General Motors plants, period. These are big customers.

I think the chairman said if they don't use the network we're not worried about them. We are worried about them because they are the ones that are paying——

Mr. **Wyden**. If the gentleman from Iowa will yield. I think our witness understands there are very few bypassers in this country that completely get out. How many of them are there?

Mr. **Snedaker**. I'll get the information. I don't have it right here.

Mr. **Wyden**. I think the gentleman knows that the vast, vast majority of bypassers in this country interconnect with the network and those are the ones that we deal with, of course, in the House-passed bill.

My friend Gene Eidenberg, we've known each other from Democratic days. Gene said that the task force didn't seem to understand the issue of taxing the bypassers.

Now I remember exactly what we did in 4102, the House bill, and all we did was codify the FCC decision which had been to impose just such a tax, so I think it's clear that the FCC is moving toward some technology on how to deal with most of the bypassers in this country. Those are the ones that interconnect with the system.

Mr. **Bedell**. Surely it's not 90 percent of them that are bypassing. You're saying you'd rather have 10 percent of what you were going to get because of the possibility that somebody might bypass if you ask for the hundred percent.

Mr. **Snedaker**. The very incentive to bypass is not to use the local network so you don't have to pay the subsidy, so if I'm a big business customer I don't want to pay that $5 billion subsidy, I'm going to bypass. In other words, I have an incentive to bypass any way I can.

Mr. **Bedell**. No argument about that if it's only from one General Motors office to another General Motors office, but surely if anybody needs to have access to our total system it's General Motors, for crying out loud. Surely they have to be where they can telephone their dealers, where they can do all these sorts of things.

Again, the thing that I can't understand about your argument is the question of whether or not you're going to $1 billion or $1.5 billion. It seems to me it's whether it's $1 or $10 billion.

If I were sitting there running a company and I had the choice of getting 10 billion bucks and maybe losing 10 percent of it because General Motors is going to make a few calls so I'm only going to get $9 billion to furnish service for my customers or I'm going to decide I only want $1 billion, it seems to me that business choice would be so darn simple.

Mr. **Snedaker**. I think that we're missing another point. There's an outfit called Olympia York that United is tied in with that is the biggest owner of office space in the United States and they lease space to anybody that wants to come in.

They are setting up networks between major cities that bypass the local network completely so it's not just General Motors. It's anybody in their complex. You could move in. I could move in. An accounting firm could move in. They have satellite dishes, local cable in the buildings that they own and they go to every other city.

Now you might say, yes, but the other cities they have to get the local networks but I'm suggesting that there are other office complexes there where they don't have to use the local network. They can use Manhattan Cablevision or—I think this thing is much bigger—they can use the teleport.

When you use the teleport, you're not using local facilities and there are all kinds of businesses—Merrill Lynch, banks and everything else.

I think we are understating this, and I do agree with the chairman that we should try to quantify this and get this information to your task force because it is an unknown. I don't know the answer and I'm not even going to try to tell you I know the answer.

I think we have to get as much data to you as fast as we can and then certainly you decide whether it's a big issue or not.

Mr. **Wyden**. I want to let Mr. Eidenberg—I guess the point is that your last statement says we really don't know the threat of bypass and how serious it is, yet for well nigh 6 hours now it has been trotted out hour after hour after hour as being the justification for access charges, so we can't have it both ways.

I mean, either it's a substantial threat and you see that as your rationale for pursuing access charges, or it's not such a substantial threat and we should put things like access charges on hold so that people like yourself can work with the task force and other regulatory bodies to see how great the threat is.

I think that, Mr. Snedaker, you're the chairman of the board and I'm the chairman of the committee, but I think that is the——

Mr. **Snedaker**. It falls between big and mammoth and I can't quantify that.

Mr. **Wyden**. I think that's the frustration of the Congress and the task force, is that we've heaped all these extra charges on now and we're going to go back later to try to see if they are really warranted and there may be a whole lot fewer people in the system, small businesses and other people when we go back to try to undo the damage.

Mr. Eidenberg has waited very patiently and I know he would like to comment.

Mr. **Eidenberg**. Thank you, Mr. Chairman.

Both for you and Congressman Bedell, I want to go back to the $11 billion question and your very strong exception to the notion that maybe the amount that the industry ought to be paying would be in the $1 billion range or whatever the universal service fund turned out to be.

I think the underlying point is that the cost of doing business equals what the costs are to provide that local origination and termination for a long-distance company. Whatever that cost is, we ought to pay the local company for that. No question.

The issue is whether the $11 billion of subsidy that is built into the long-distance industry's fees are fair, are right, are related to the cost of providing the service.

I want to make two assertions. No. 1, the $11 billion, let's just take it for discussion purposes, as absolutely accurate to the last decimal point. That $11 billion grew up as a result of a 50-year-long process of separations and settlements and divisions of revenues within the Bell System when it was an integrated company.

There is no known economic rationality or data that says that $11 billion in fact is related to the cost of providing local loop service to long-distance companies. That's point No. 1.

Point No. 2, in every public proceeding that I know about at the State level, at the Federal level, and at the judicial level, including Judge Greene's court where the issue of the breakup of AT&T was resolved, no publicly responsible body has yet to demonstrate empirically that there is a subsidy running from long-distance fees and revenues to keep local rates low that even approximates an $11 billion figure.

The subsidy, it can equally be argued, went to subsidize the Western Electric manufacturing plant, went to subsidize the Bell Labs, went to subsidize a variety of services inside the Bell system.

Judge Greene has said in his consent decree decision that he has never seen support for the proposition that long distance revenues are keeping local rates low.

The subsidy is doing such things as providing for second and third phones for people who have ski lodges. There may be some subsidy in there but it's never been demonstrated on the public record, Mr. Chairman.

Mr. **Bedell**. Would the chairman yield?

Mr. **Wyden**. I would be glad to.

Mr. **Bedell**. I think that's exactly the issue. The issue is that your contention is that the subsidy should be based upon the cost of providing that service.

Mr. **Eidenberg**. Absolutely.

Mr. **Bedell**. That's not the way magazines work. That's not the way newspapers work. What you pay is what it's worth to you to have that service and my contention is that AT&T must have decided that it was worth $11 billion to them to have telephones in everybody's house. I think that was a good decision, by the way. I think you really made a good decision.

I think magazines have decided they ought to sell their magazines for a buck even if it cost them $2 to publish them because they're going to get that revenue back from their advertisers.

I think that's the whole issue. The whole issue is, are we going to change the system from where it has been, which was that AT&T thought it was worth quite a lot to them in order to have telephones, to where we're going to say that whoever has a telephone has to pay whatever it costs to provide that telephone.

My contention is that it's a bad change we're making in the way the system works, particularly because what we're doing in my opinion is jeopardizing the system and then moving the cost down to the people who can least afford to pay those costs.

That's our whole argument here, and I think you put your finger right on it.

I think the judge was wrong, frankly, and I think that Congress would feel that we ought to continue to operate the system similar to the way it did in the past and similar to the way of newspapers and magazines and every other manufacturer.

I have a fishing tackle business. We sell things at less than we should because we think it's going to help the rest of our business. That's the way the system works and I think that's the whole issue.

I thank the chairman for yielding.

Mr. **Wyden**. I think this has been a very helpful discussion and, Mr. Eidenberg, I guess where we are with this $11 billion is you say that it hasn't been proved that this $11 billion isn't subsidizing two and three lines for people's vacation homes, and the flip side, of course, is that it hasn't been proved that it is and that's where we are, trying to figure out now how to proceed.

I want to just to go ahead with this bypass exchange for just another moment.

When I listened to your testimony and having been at this now for a couple of years generally, I get the impression that many who share your views think that people just go out and bypass at the drop of a hat, that they get a bit of an increase in their phone bill and they just go out and bypass, just kind of like going out and buying a new shirt or maybe a suit.

I think the fact is that's not the case at all. If you're going to bypass in this country, and let's talk about exactly that happens, you are going to incur enormous costs in building your own system. Then you have Chairman Dingle and others under 4102 looking at ways using the FCC model to make you pay.

I just find it very hard to think that as many people are going to bypass as cavalierly as you suggest.

I want to ask two things of you. One, if you can furnish us any hard evidence today of the bypass threat and we pay such homage to the threat of bypass in this country we ought to have some hard evidence and if any of you four can furnish us your latest analysis of what the bypass threat is that would be helpful.

Mr. **Snedaker**. Mr. Chairman, could I just make a comment? I think we have a representative here who is a bypasser. I think MCI is a bypasser. MCI leases lines to bypass the network. It owns facilities to bypass the network. It has satellite capability. I would put MCI in that category. I would put Sprint in that category, USTel and a few others.

We'll be happy to supply the data and I think we should quantify it if we possibly can.

Mr. **Eidenberg**. Mr. Chairman, I'm perfectly willing to respond. I don't view bypass as a bad or evil thing. Call bypass by another name. Call it customer choice.

There are two reasons why people will choose to bypass the local network, and I couldn't agree with your statement more. It is not an easy proposition. It is not an inexpensive proposition and it is not an action which is lightly entered into by a customer that wants to directly link to our interstate network. There are two reason why people do it.

Our company policy, by the way, is not to bypass. We do not want to bypass the local loop. We don't want to make the capital investment to try and replicate that local loop.

There are two reasons why we will, however. We will bypass if regulatory policy, Federal or State, drives or maintains local access costs at such a level for the long distance companies that the cost bears no relationship to the cost of providing the service; to use your phrase, not related to the cost of doing business.

When it reaches that kind of level, then our customers will say to us it will be in their business interests to pay what it really costs to link into the network, not some number inflated by a factor of two or three or four because regulatory policy forced it upon us.

Second, we'll bypass the local loop if the local telephone company can't provide a specific kind of service, a high speed data transmission service or something of the sort.

I will tell you, Mr. Chairman, a day doesn't go by in our business where a large customer, potential or already a customer, doesn't come to us and ask can we sit down and talk about how we can make direct links.

We do provide direct connections for some customers where the economics of it just dictate it, or where the service wasn't available from the local telephone company, but our policy is to use the local telephone company. Which is why we appear before this subcommittee, this task force, before regulatory bodies at the federal and state level, pleading for public policies that address the legitimate societal needs for a basic, healthy, viable, universally available telecommunications system. One which does not treat the interexchange industry as a beast of burden financially. That will only build in incentives which over time—not in the short run, bypass is not a short run phenomena—will erode the financial viability of the local telephone companies.

We don't want to see that happen. We don't think it's in the Nation's interest. We don't think it's in our business interest. I think there has got to be a balance struck here.

Mr. **Snedaker**. It's also, Mr. Chairman, not in the telephone companies' interest. These are our two biggest customers right here and we don't want to have them leave our local network and that's the dichotomy of what we're facing.

Mr. **Wyden**. Let me wrap up with this. I would hope that it would be clear that access charges are not all that popular on Capitol Hill. I think that's no secret and you have gotten that message loud and clear.

It seems to me we have a real opportunity right now and that is that access charges and the formal debate isn't likely to begin before next January. There may be things that happen that I can't anticipate and all of a sudden we'd be back on the floor of the House and the Senate sooner but I don't think it's all that likely and I think you would agree.

So it seems to me we have an opportunity here to go to the drawing board and go to the drawing board together and try to come up with some alternatives and try to see if there is a fair way to allocate costs and run the first class communication system that the people of this country want.

I don't expect any of you gentlemen to be able to spin out an alternative off the top of your heads, but I want to invite you to work with the task force on developing alternatives because I can tell you access charges, in my view, are not likely to get through the U.S. Congress and be part of a communication rewrite.

I may be misreading Chairman Dingle on this but I don't very often, and I do not think access charges are going to become the law of the land the principal route by which Congress tries to allocate these costs.

I think that the brass ring next year when we reenter this debate is going to go to those people who have some alternatives, who can come forward when someone like Chairman Dingle or Chairman Worth says, well, you don't have any alternatives, we'd like to know how else you would like to proceed and I would like to see us as a task force and the members who are interested stand there with some alternative ways of allocating these costs and you can help us with that.

I'm going to wrap this up. I have various other sticky and uncomfortable questions to ask but I'm in the spirit of trying to go from here and see if we can come up with some good alternatives. We're going to save those for another time.

I do invite you gentlemen to work with the task force, specifically to come up with some alternatives to access charges, and we apologize for the delay in running to and fro and we look forward to working with you in the days ahead.

With that, the task force is adjourned.

[Whereupon, at 3:45 p.m., the subcommittee adjourned to reconvene subject to call of the Chair.]

APPENDIX

Appendix A.--Questions to the FCC and Their Responses

MAJORITY MEMBERS
PARREN J. MITCHELL, MD., CHAIRMAN
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JOSEPH P. ADDABBO, N.Y.
HENRY B. GONZALEZ, TEX.
JOHN J. LAFALCE, N.Y.
BERKLEY BEDELL, IOWA
HENRY J. NOWAK, N.Y.
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ROMANO L. MAZZOLI, KY.
NICHOLAS MAVROULES, MASS.
CHARLES HATCHER, GA.
RON WYDEN, OREG.
DENNIS E. ECKART, OHIO
GUS SAVAGE, ILL.
BUDDY ROEMER, LA.
NORMAN SISISKY, VA.
ESTEBAN EDWARD TORRES, CALIF.
TOM J. VANDERGRIFF, TEX.
JIM COOPER, TENN.
JAMES R. "JIM" OLIN, VA.
C. ROBIN BRITT, N.C.
RICHARD RAY, GA.
CHARLES A. HAYES, ILL.

Congress of the United States
House of Representatives
COMMITTEE ON SMALL BUSINESS
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AREA CODE 202

July 3, 1984

The Honorable Mark S. Fowler
Chairman
Federal Communications Commission
1919 M Street, N.W.
Washington, D.C. 20554

Dear Chairman Fowler:

Once again, thank you for testifying before the Committee on Small Business on the impact on small businesses of access fees and other recent FCC decisions. As you know, the Committee is very interested in telephone rate issues.

A number of members had additional questions. As per our agreement, we will keep the record open for your responses. The questions are as follows:

1. The Task Force is very interested in past and future studies of the effects of changes in the telephone system on small businesses.

    a. Has the FCC studied the potential effects on small businesses of the access charge and other increases in local telephone charges?

    b. Specifically, by what percentage would business telephone lines be reduced if local telephone charges rose by 100%.

    c. What effect would a decline in the number of residential and business lines have on the level of local telephone charges on the remaining residential and business lines?

    d. You noted in your testimony, Chairman Fowler, that the FCC had completed studies of the effects of recent FCC mandated changes on small businesses. Please provide a dozen copies of all such studies to the task force.

    e. In your testimony you agreed to further study of the effect on small businesses of the FCC's recently mandated changes. We would like to assist in any way we can. The Committee on Small Business can obtain a random sample of nonfarm businesses by size and type of business (SIC code). If we provide the FCC with such a sample, will the FCC formally request that the telephone companies provide data on telephone usage for the sample? And, will the FCC then analyze the individual company data to determine the impact of recently mandated increases in local per line rates on small businesses? Please contact me on this issue as soon as possible.

2. a. In your testimony, you stated that the elasticity of residential demand for telephone access is 0.01. What is the specific, original source of the figure you quoted?

   b. Does the elasticity of demand figure you quoted apply to all states under existing penetration and billing practices?

   c. If not, please specify the conditions under which it applies. Also, please provide the elasticities that apply under other conditions.

   d. Was longitudinal or cross-sectional data used? If cross-section data was used, what are its limitations in determining demand elasticity for telephone access?

   e. Are there additional studies of residential telephone demand elasticity which arrived at different results than the result you quoted? If so, please provide a brief summary for the record.

3. a. Please provide a detailed breakdown of the elements or components of non-traffic sensitive (NTS) costs. How were the NTS costs determined?

   b. Are NTS costs based on cost accounting data from the telephone companies or are they estimated from revenue or financial accounting data?

   c. In response to a question from Congressman Ike Skelton, you stated that the FCC had audited (in the sense of a certified financial audit) the telephone industry's figures on traffic and non-traffic sensitive costs. Please provide the Committee with a dozen copies of the FCC's audit.

   d. What types of costing and accounting procedures do you have to assure that rates charged for access services are just and reasonable?

   e. In Ohio, as much as 50 percent of local loops are spares or excess capacity. Are the spares part of NTS costs? Who pays for the excess capacity? Do the telephone companies have an incentive to optimize the amount of excess capacity? If so, please explain the incentives. Has the FCC regulated the level of excess capacity?

4. In your testimony you cited, as you have on a number of other occassions, a study prepared by Wharton Econometrics Forecasting Associates. The study assumes that telephone usage prices will rise by 0.7 percent (seven tenths of one percent) in 1984.

   a. Is it realistic to assume that total telephone usage charges will increase by only 0.7% in 1984? Please explain.

b. By how much did local telephone prices increase per line in 1982 and 1983 (please be specific)?

c. Did the Wharton study take into account the income effects on residential users of rising local telephone charges?

d. Do you agree with Wharton's computations on how docket 78-72 will affect telecommunications prices? If so, could you provide detailed explanations of how these computations are derived and what data was used to derive them? If not, could you explain what adjustments are needed in Wharton's figures?

e. The Wharton study states that the access charge decision will create 400,000 new jobs. How many of these jobs will be in small businesses? What types of jobs will be created?

5. a. Can the FCC document a case of "bypass" leading to a rate increase or to stranded investment? Please provide specific details.

b. How much of "bypass" is economic "bypass"? How much is uneconomic?

c. What percentage of "bypass" is caused by service and security considerations?

I greatly appreciate your generous contribution of time and your offer to respond to our many questions. On the question of further study of the effects of recent changes on small business -- question 1.(e), please contact the Task Force as soon as possible. On the other questions, please submit your answers by July 31, 1984, for the hearing record.

With kind regards, I remain

Sincerely,

Ron Wyden
Chairman
Special Task Force
on Telephones

RW:khg

FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D. C. 20554

AUG 2 1984

OFFICE OF
THE CHAIRMAN

Honorable Ron Wyden
Chairman, Special Task Force
on Telephones
Committee on Small Business
2361 Rayburn House Office Building
Washington, DC 20515

Dear Congressman Wyden:

The following are responses to the additional questions contained in your letter dated July 3, 1984:

1a. The Commission has not specifically studied the potential effects on small businesses of customer line charges and other increases in local telephone charges. The Commission did, however, extensively examine the potential effects of certain Federal decisions (including the Commission's access charge decision) on local telephone service in its CC Docket No. 83-788 proceeding (copy enclosed as attachment 1). Some of the information obtained in that study pertains to business customers, but not specifically to small business customers.

b. The access demand elasticities for business customers filed in the Commission's CC Docket No. 83-788 ranged from -.01 (short run; Egan study submitted by Southwestern Bell) to -.15 (long run; Data Resources, Inc. study submitted by the State of Connecticut Department of Public Utility Control). The latter study, however, measured elasticity for both "access" and "usage," so that it cannot reliably be used to predict the reduction in lines resulting from an increase in telephone charges. In addition, the Data Resources, Inc., study was a time series analysis, which tends to overstate the degree of price sensitivity, because it does not accurately account for the increase in demand for telephone service over time. See generally, K. Gordon and J. Haring, "The Effects of Higher Telephone Prices on Universal Service," OPP Working Paper Series (March 1984) (copy enclosed as attachment 2). Putting aside these and other infirmities, a simple calculation from the elasticities in the studies submitted in CC Docket 83-788 would suggest that a 100% increase in local telephone charges would reduce business telephone lines between 1% and 15%.

c. The effect a decline in the number of residential and business lines would have on the remaining residential and business line subscribers is dependent on the varying effects of relevant factors. These factors must be weighed in a specific factual context before a response can be given. Under both the historical and Commission access compensation plans, the effect would depend upon the proportion of traffic and non-traffic sensitive plant owned by the telephone company, as well as the local, intrastate and interstate usage patterns of the residential and business customers giving up lines.

d. The study referred to in the testimony of June 26, 1984 was the CC Docket 83-788 proceeding. A dozen copies are enclosed.

e. Commission staff is meeting with representatives of the Committee on Small Business and the General Accounting Office to discuss the proposed study of the effect on small business of recent Federal decisions. In addition, on July 12, 1984, the Commission issued a Public Notice seeking public input on this issue.

2a. The source for the -0.01 demand elasticity figure was the preliminary results of the 1983 study by Dr. Lewis Perl, based on 1980 census data.

b. The 1983 study by Dr. Lewis Perl (copy enclosed as attachment 3) provides elasticities varying by alternative prices and telephone penetration rates (Figure 5, page 15), and elasticities varying by income, age and household type (Figure 23, page 43).

c. See the response to question 2b., above.

d. Cross-sectional data was used in the study by Dr. Lewis Perl. Such a model has shortcomings in its predictive abilities for future rate change analysis because factors not included in the model (e.g., the value of telephone service) may vary over time. The actual future elasticities may be higher or lower than those predicted by the model. See generally, K. Gordon and J. Haring, "The Effects of Higher Telephone Prices on Universal Service" at pp. 14-20 (arguing that elasticity studies overstate sensitivity to prices).

e. The report adopted by the Commission in CC Docket No. 83-788 at pp. 24-30 discusses the various demand elasticity studies for telephone service. All the studies indicate that demand for telephone access is inelastic.

3a. The distinction between traffic sensitive (TS) and non-traffic sensitive (NTS) is generally made for separations purposes (that is, for the allocation of investments and expenses between state and interstate jurisdictions). The distinction is explicitly made in the Separations Manual (Manual) in only one place--in reference to local dial switching equipment--and is as follows:

> The cost of non-traffic sensitive equipment comprises the cost of those items of equipment used jointly for both exchange and toll services, the quantities of which are determined as a function of the number of subscriber

> lines terminated and which in no way are a function of the busy hour or total volumes of attempts, calls, or messages offered to or switched by the office, together with a share of the cost of common equipment items, such as aisle lighting, ladders and ladder racks and framing, test equipment, power plants, etc.... The cost of traffic sensitive equipment comprises the cost of all other local dial equipment, including its share of the cost of common equipment items. (Manual Section 67.138(b)).

The distinction made, however, can be applied to other equipment. Based on this, the complete list of NTS equipment is as follows:

> Central Office Equipment - Category 6, Local Dial Switching Equipment (only that portion assignable based on the distinction made above)
>
> Central Office Equipment - Category 8.13, Subscriber Line Circuit Equipment Excluding Wideband
>
> Outside Plant - Category 1.33, Subscriber Line Outside Plant Excluding Wideband; Subscriber line outside plant used jointly for exchange service and toll message services, including WATS access lines.
>
> Station Equipment - Category 5, Other Station Equipment

In addition to the investment amounts associated with the above categories, the amounts in Account 603, Test Desk Work Expense for testing of subscriber lines and service order testing can be considered to be a direct NTS expense.

b. In the separations process, equipment is categorized (as shown in the above list of NTS equipment). With the exception of Central Office Equipment (COE) - Category 6, categorization should effectively allow for direct assignment of the related investment amounts to a TS or NTS classification if such is required. The total amounts assigned to COE - Category 6, however, must be segregated by switching office between TS and NTS. In this case segregation is accomplished by applying to the book costs of this equipment a percent-NTS-factor appropriate for the type of equipment and the size of the office. The NTS factors are developed by analyzing the costs of local dial switching equipment in selected local dial offices which are representative of the several types and size ranges of offices and which are chosen for study by sampling methods.

The categorization process itself, however, is not always simple. The process usually involves the identification of assignable equipment and the determination of the cost of that equipment by analysis of plant, accounting and engineering records, maintained and supplemented by periodic studies and inventories.

c. Attached is a list of audits we have conducted in recent years that dealt with areas related to investments in NTS equipment (attachment 4). There is, however, no audit that focuses exclusively or directly on the TS/NTS issue. A dozen copies of the most recent audit report are being provided along with this response. The listed audits are available for inspection, but due to their length, we have not reproduced and transmitted them to you. The information referred to in response to Congressman Skelton's question was a survey of non-traffic sensitive costs collected by the Commission in 1982. Enclosed is a detailed description of the data base derived from that study (attachment 5). The data tape is available for inspection and use. In addition, the National Exchange Carriers Association is presently refining and updating the data base (although the proprietary nature of some of the information may limit its availability).

d. The Commission, through both its tariff review procedures and its auditing procedures, ensures that the rates charged for access services are just and reasonable. In this regard, the review of the initial access tariffs resulted in a Commission prescribed rate reduction of 8.5% to the switched access tariffs. In addition, the implementation of a new Uniform System of Accounts will further assist the Commission in monitoring the reasonableness of charges for access service. Finally, review by the states of local exchange companies' revenue requirements serves as a check on excessive rates.

e. In determining a telephone company's revenue requirement under the separations procedures, both working and non-working subscriber lines are included. These costs are then recovered from the ratepayers through flat monthly charges and usage sensitive charges for local service and interstate and intrastate toll usage. Under traditional rate base regulation, a carrier is entitled to a fair rate of return only on allowable investments; thus, a carrier is penalized for unreasonable investment and so has incentives to invest efficiently. It should be noted, however, that long-run cost savings may be realized by building plant with "excess capacity" at present--thus spare capacity may well be prudent and not unreasonable. The Commission has not recently regulated the levels of "excess capacity" ubiquitously; rather, it has deferred to the states, in most instances, review of telephone company investment in local access facilities.

4a. It is realistic to assume that total telephone usage charges, including local, interstate and intrastate, will only increase by a moderate amount in 1984. Although local and intrastate rates may increase, it is also expected that interstate rates will decrease in 1984.

b. According to figures supplied by the Bureau of Labor Statistics, the prices for local service for urban consumers on a nationwide basis increased from June '81 to June '82 by 14.2%; from June '82 to June '83 by 8.1%; and from June '83 to June '84 by 12.9%. Those same calculations for total telephone prices, including local and toll, were 13.7%, 6.2% and 7.9%, respectively.

c.-e. The study by Wharton Associates was prepared by consultants independent of the Commission. Although I do believe that the directions of the predicted effects are correct, I cannot judge the accuracy of the particular numbers selected. Detailed information with regard to the assumptions, parameters, adjustments and outputs of the econometric model cannot be provided by the Commission, but rather should be obtained from Wharton Associates.

5. The Commission has received numerous examples of implemented as well as planned bypass systems, which have the potential for seriously impairing universal service. *E.g.*, Westinghouse in Pittsburgh, Pennsylvania; Department of Defense; GTE Sprint's "Sprint-WATS" and SBS' "Message Service 2"; Boeing in Seattle and Kent, Washington; Duke University; Hughes Aircraft in Los Angeles; Citicorp; commerical buildings with private telecommunications systems for tenants, such as Olympia & York's "Olympia Net"; and large scale teleports such as the New York Teleport. The staff of the Commission is currently collecting and analyzing data and information related to bypass. The staff study will, *inter alia*, allow the Commission to quantify rate increases and stranded investment attributable to bypass, determine more precisely the causes and incentives for economic and uneconomic bypass, and identify uneconomic bypass versus economic bypass. Questions a.-c. will thus be addressed in the staff study which is scheduled to be completed prior to the end of the year.

I trust that you will find the above responsive to your inquiries. If you need more information, we will be happy to provide it.

Sincerely,

Mark

Mark S. Fowler
Chairman

Enclosures

P.S. I greatly enjoyed our meeting of today, Ron.

IKE SKELTON, Mo.
CHAIRMAN

NICHOLAS MAVROULES, MASS.
CHARLES HATCHER, GA.
ESTEBAN EDWARD TORRES, CALIF.
BERKLEY BEDELL, IOWA

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United States House of Representatives
Committee on Small Business
Subcommittee on Energy, Environment, and Safety
House Annex 2, Room 504
Washington, D.C. 20515

April 9, 1984

Honorable Mark Fowler
Chairman
Federal Communications Commission
1919 M Street, N.W.
Washington, D.C. 20554

Dear Chairman Fowler:

Small business owners have contacted me regarding the scheduled implementation of long distance access charges imposed upon their multi-line telephone service. I am writing to express my concern about the impact this rate increase will have on these small businesses.

Small business owners question whether these additional charges can be absorbed especially in light of recent local service increases. They believe that small businesses will bear a disproportionate share of telephone charges if these access charges are implemented. Moreover, some small businesses do not even use long-distance services.

The business representatives I have spoken with are concerned that the full extent of the impact these charges could have on their business has not been fully investigated. Does the F.C.C. know or has it studied the effect of these charges on small businesses? If you are not required to do so by law, still don't you think it would be in the public's interest to conduct such a study so that we have a better idea about what results your action will produce.

I would suggest that it would be prudent to postpone any access charge increase, at least on small businesses, until the full impact can be considered.

Thank you for your time and attention to this matter. With respect, I remain

Yours truly,

IKE SKELTON
Chairman

FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D. C. 20554

OFFICE OF
THE CHAIRMAN

MAY 21 1984

Honorable Ike Skelton
Chairman, Subcommittee on Energy,
Environment, and Safety
Committee on Small Business
United States House of Representatives
House Annex 2, Room 569
Washington, D. C. 20515

Dear Congressman Skelton:

This is in response to your April 9, 1984, letter concerning telephone calls you have received from a number of constituents about charges applicable to small multi-line business subscribers as a result of Commission decisions in its MTS and WATS Market Structure Inquiry, CC Docket No. 78-72, Phase I (MTS/WATS Inquiry).

The Commission appreciates the interest you have expressed in the complex and crucial issues facing this Commission. Customer line charges are only one part, but a vital part, of an overall FCC plan designed to achieve a competitively vigorous, innovative, and efficient telecommunications industry, while preserving the high quality, universal service all Americans expect.

The Commission's January 25, 1984, decisions in the MTS/WATS Inquiry postponed until June 1, 1985, the assessment of customer line charges to recover residential and single-line business customer line costs. The Commission deferred these charges so that it could conduct the following further proceedings: (1) a further rulemaking to devise exemptions or target assistance for subscribers who may not be able to afford customer line charges; (2) a further inquiry into the effects upon universal service of customer line charges as well as federal decisions in general; (3) a further inquiry to compile more detailed data upon the extent and dangers of bypass; (4) a further rulemaking to adopt more effective mechanisms to meet the needs of small telephone companies for more assistance; and (5) a further rulemaking to examine how best to implement a customer line charge for residential and single-line business customers.

While questions remain regarding assessment of customer line charges to residential subscribers, the Commission found that recovery of a portion of customer line costs attributable to multi-line business subscribers through flat charges assessed to these subscribers was necessary and appropriate at this time. The Commission also found that the multi-line business charge would have no adverse impact on universal service and that failure to recover some fixed costs through flat charges will result in growth of uneconomic bypass. Such a result would not only impair economic efficiency, but would also lead to increased charges for users of underutilized telephone company facilities. The Commission remains convinced that uneconomic bypass is a threat to the vitality of the telecommunications network.

With respect to the local telephone companies' tariffs, on May 10, 1984, the Commission ordered a reduction of 8.5 percent in the rates that local telephone companies proposed to charge interexchange carriers for use of exchange facilities to originate or terminate interstate services, which will result in significant reductions in long distance charges. With this revision, the Commission is allowing the switched access tariffs filed by the National Exchange Carrier Association (NECA) and individual exchange carriers to become effective May 25, 1984, provided that all of the Commission's mandated changes are satisfactorily implemented. Implementation of these tariffs will give effect to customer line charges of up to $6.00 for multi-line business customers. We expect that the average charge for these customers will be $4.75 to $5.00 per line per month. The Commission also reaffirmed its prior intent to decide by early December whether to assess customer line charges upon residential and single-line business customers. Special access provisions, dealing with connections for private line services, are not affected by the Commission's May 10 decision, but will be dealt with later. Therefore, major private line rate changes sought by the carriers, which have proven very controversial, remain deferred. Enclosed are news releases concerning our recent decisions in CC Docket Nos. 83-1145 and 78-72.

I welcome this opportunity to explain why, as we begin to implement our MTS/WATS Inquiry decisions, our nation's businesses will benefit for many years to come. The most obvious benefits will be lower long distance telephone bills for those companies using interstate long distance services. On May 10, 1984, the Commission in a landmark decision ordered AT&T to implement a 6.1 percent across-the-board reduction in its rates for long distance telephone (MTS and WATS) services, both domestic and international, effective May 25, 1984. If this plan is extended, there will be reductions in interstate long distance rates of at least 35 to 40 percent. These lower long distance rates will make possible new opportunities for small businesses in America. They will facilitate the increased use of telecommunications to support marketing and sales activities, and to improve productivity. They will enable a merchant to connect his or her small computer to information data bases and processing systems in other areas, thereby participating more fully in the information economy and making his or her business more efficient. Most businesses in the long run - indeed, within the next year or two - will profit substantially from the Commission's decisions in the MTS/WATS Inquiry, because these decisions will diminish inefficiencies which now propagate through the entire economy, resulting in improved real economic growth.

Other overall benefits to the nation will be even greater. Among the principal reasons for customer line charges are the rapid developments in technology and competition. The magnificent new technologies for transmitting information - microwave, fiber optics, satellites - promise to reduce the cost and improve the quality of all communications. Competition will allow both new entrepreneurs and established companies to use these technologies to provide innovative new services. We can no more imagine what these services might be than we could have imagined home computers, pocket calculators, and video games before integrated circuits and competitive energies made them a reality.

If competition and innovation in communications are to develop freely, regulations designed for networks of copper wires and a single, vertically integrated, monopoly provider of interstate services must change. We must change rates to ensure that they reflect actual costs in the segments of the market that, at least in the short-term, will probably continue to retain monopoly characteristics - such as local exchange services - while competition drives prices to costs in the areas that are competitive. Our decisions in the MTS/WATS Inquiry will accomplish this. They will result in fairer rates to business and residential customers as well as to long distance telephone companies, but without impairing the universality of telephone service in this nation. Businesses will increasingly be able to buy telephone services the way they buy other services and products - at competitive, cost-based prices that are not burdened by elaborate, inefficient cross subsidies.

As this competition develops, the nation as a whole will benefit. According to a study by the prestigious Wharton Econometrics Forecasting organization, the Commission's decisions would, within the next five years, increase real GNP by $46.2 billion, create almost 400,000 new jobs, reduce the overall price level almost 1 percent, and shrink the federal debt by $21.5 billion. These are benefits any business person and any American can understand and appreciate. In the longer term, freeing our telecommunications industry to compete vigorously will produce still greater and longer-lasting benefits. In the international arena, it will help maintain America's position at the leading edge of telecommunications, an important and fast-growing segment of the international economy.

The Commission recognizes that not all businesses will profit immediately from our decisions. The 6.1 percent reductions in long distance rates associated with the introduction of customer line charges are necessarily smaller than they would have been under the Commission's original plan due to the deferral of residential and single-line business line charges. As further Commission decisions concerning customer line charges are implemented, however, the rate reductions, resulting savings to businesses, and productivity improvements should grow substantially.

Over the last six years, this Commission has carefully studied the future needs of the public and the telecommunications industry. Our decisions in the MTS/WATS Inquiry will be designed to meet those needs. No one group stands to gain more from this plan than small businesses, which - unlike major corporations - lack the means to construct their own private telephone systems and must depend on the public network to satisfy their vital telecommunications needs. Under these decisions all enterprises will enjoy lower telecommunications costs and better and more varied services. In short, we believe that if the business community will look just a short distance into the future, it will recognize that the MTS/WATS Inquiry plan offers this bottom line: a more productive economy and a more prosperous America.

Sincerely,

Mark S. Fowler
Chairman

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DISTRICT DIRECTOR

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COMMITTEE ON PUBLIC WORKS
AND TRANSPORTATION

SUBCOMMITTEES
WATER RESOURCES
AVIATION

COMMITTEE ON SMALL BUSINESS

SUBCOMMITTEE
ANTITRUST AND RESTRAINT
OF TRADE

ASSISTANT REGIONAL WHIP
REPUBLICAN POLICY COMMITTEE

July 17, 1984

Chairman Mark S. Fowler
Federal Communications Commission
1919 M St. N.W.
Washington, D.C. 20554

Dear Chairman Fowler:

I was pleased to have the opportunity to participate in the Small Business Telephone Task Force Hearing on June 26, and appreciate your openness in answering our questions.

As discussed in the hearing, enclosed are some follow-up questions to your testimony. If I could receive your answers by August 10, I will be happy to make the information available to all members of the task force.

The questions are as follows:

1) Do you intend to move up your schedule and impose residential end-user charges in January, 1985?

2) Could you provide me with copies of any studies done by the Commission that document the reduction in the burden on toll attributable to imposition of multi-line business end-user charges?

3) a) How many dollars worth of interstate long-distance toll calls does a subscriber have to make to benefit from the 6.1% reduction in long-distance rates?

   b) How many small businesses with more than one phone line make enough interstate calls to benefit from the reduction?

4) What is the Commission doing to ensure that telephone rates in high cost rural areas are maintained at a level comparable with that charged in urban areas?

5) What is the Commission's policy on toll rate averaging, and where is this policy stated?

6) What will the Commission do if a request is made to move away from averaging toll rates?

7) What assumptions were made by AT&T and Wharton Consulting in their study which states that, among other things, taking subsidies out of long-distance rates would create 400,000 new jobs, a new wealth in society at all levels, decrease the national debt by $21 billion (due to increased tax receipts), and reduce the costs of goods and services in the nation by 1%?

8) Do you believe that the elasticity of demand for telephone services is constant for business of all sizes? If so, on what basis do you reach this conclusion?

9) Does the FCC plan on doing its own, independently financed study on the effects of access charges?

Again, Chairman Fowler, thank you for your time and straightforward answers. Your reply will be submitted to the record of the hearing.

I look forward to your prompt response.

Sincerely,

Vin Weber
Member of Congress

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2D DISTRICT, MINNESOTA

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REPUBLICAN POLICY COMMITTEE

July 17, 1984

Mr. John Motley
National Federation of Independent Business
600 Maryland Avenue S.W.
Suite 695
Washington, D.C. 20024

Dear John:

I was pleased to hear your testimony at the Small Business Telephone Task Force hearing on June 26, and am likewise delighted that the National Federation of Independent Businesses is working on this issue.

As discussed at the hearing, below are some follow-up questions to your testimony. If I could receive your answers by August 10, I will be happy to make the information available to all members of the task force.

1) How many small businesses are adversly affected by access charges?

2) Please comment upon Chairman Fowler's assumption that the elasticity of telephone demand for all sizes of businesses is constant.

3) In the hearing, you alluded to two misconceptions found in the current FCC access charge. These included the fact that most small businesses don't have to pay the access charge, since they qualify for the one-line business exemption, and that these access charges will be off-set by new, lower, interstate 'phone rates. Could you please explain and expand upon these and other misconceptions?

4) Please comment on the Pearl Study as it affects small business. Was this study based on valid data?

Again, John, thank you for your time. Your reply will be submitted to the record of the hearing.

I look forward to your prompt response.

Sincerely,

Vin Weber
Member of Congress

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July 17, 1984

Mr. David C. Fullarton
Executive Vice President
National Telephone Cooperative Association
2626 Pennsylvania Ave. N.W.
Washington D.C.   20037

Dear Mr. Fullarton,

I would like to express my appreciation for the insightful testimony of the National Telephone Cooperative Association at the Small Business Telephone Task Force Hearing on June 26. As you may already know, we are sensitive to your concerns, and will continue to work hard to establish a fair telephone pricing system.

It would be most helpful to us if you could provide the general number of businesses which have dropped 'phone service as a result of the imposed access charges. I will share this information with the other members of the task force, and put it on the record of the hearing.

I look forward to reading your prompt reply.

Sincerely,

Vin

Vin Weber
Member of Congress

FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D. C. 20554

OFFICE OF
THE CHAIRMAN

AUG 10 1984

Honorable Vin Weber
House of Representatives
Washington, D.C. 20515

Dear Congressman Weber:

The following are responses to the questions contained in your letter dated July 17, 1984:

Question No. 1:

Do you intend to move up your schedule and impose residential end-user charges in January, 1985?

Answer

In a January 1984 order on reconsideration in CC Docket No. 78-72, the Commission deferred customer line charges for residential and single-line business subscribers until June 1985. At that time we stated that, before we allowed customer line charges for these subscribers to become effective, we would study further the desirability of exemptions or targeted assistance for subscribers who may not be able to afford customer line charges; the effect upon universal service of customer line charges as well as federal decisions in general; the extent and dangers of bypass of the public telephone network by large telecommunications users; more effective mechanisms to meet the needs of small telephone companies for additional assistance; and how best to implement customer line charges for residential and single-line business customers. The Commission also stated that, if residential customer line charges are established at the conclusion of these studies, the charge would be capped at $4 per month until at least 1990.

In late March, the Commission began these further proceedings by requesting comments, with a completion of these proceedings presently scheduled for December 1, 1984. As a discretionary matter, pursuant to Section 410(c) of the Communications Act, the Commission also concluded that preparation of a recommended decision concerning these issues by the existing Federal-State Joint Board in CC Docket No. 80-286, Amendment of Part 67, involving jurisdictional separations, would facilitate our decision-making process. The Joint Board will submit its recommendations concerning customer line charges to the Commission by November 15, 1984. Final Commission action on this and the other proceedings is scheduled for December 1984. In order to provide telephone companies with time to complete the preparation of tariffs based on Commission action and to provide all interested parties with an opportunity to comment before such tariffs become effective, it is unlikely that customer line charges could become effective much before June 1, 1985. January 1985 is not considered realistic.

Question No. 2:

Could you provide me with copies of any studies done by the Commission that document the reduction in the burden on toll attributable to imposition of multi-line business end-user charges?

Answer

The Commission's order adopted May 10, 1984, required exchange carriers and AT&T to reduce their rates. That order cited the National Exchange Carrier Association's estimate that the multi-line business customer line charge would yield $973 million in revenues annually. NECA March 15, 1984, filing, Description and Justification, Vol. 1, p. 4-36.

Question No. 3(a):

How many dollars worth of interstate long-distance toll calls does a subscriber have to make to benefit from the 6.1 percent reduction in long-distance rates?

Answer:

Because most subscribers pay no end user charge at present and the charge where applicable ranges from $2 to $6 per line depending upon the local exchange carrier and the type of service, the break-even point varies. For residential and single-line business subscribers, there is no customer line charge and the 6.1 percent reduction represents a pure saving regardless of how many or how few AT&T calls the subscriber makes. The major alternative long distance carriers have also generally matched the AT&T reduction, so that subscribers to those services will also see savings in their bills. The only offsetting rate increase for these subscribers is the 50 cent charge for interstate information calls, after two free calls per month. Most subscribers make fewer than two such calls a month.

For multi-line business subscribers, the customer line charge ranges from $2 to $6 per line, and averages about $5. (Some local exchange companies offer business party-line service, with customer line charges as low as 60 cents per party.) A subscriber would have to make $32.80 worth of interstate calls per line monthly to experience an overall rate reduction at $2, $98.37 at $6, and $81.98 at $5. Because the customer line charges for business are not expected to increase generally, if similar customer line charges are eventually introduced for single-line business and residential subscribers, and corresponding further reductions are made in long distance rates, the break-even point would fall substantially. Assuming a conservative 30 percent reduction in long distance rates, an average subscriber with a $5 customer line charge who makes as little as $16.67 in interstate long distance calls per line monthly would receive smaller bills overall.

Question No. 3(b):

How many small businesses with more than one phone line make enough interstate calls to benefit from the reduction?

Answer

The Commission expects to obtain information on, inter alia, usage patterns of businesses by number of lines. Such information will allow us to respond to this question when the data become available. We are working closely with the staff of the Small Business Telephone Task Force in developing the relevant data.

Question No. 4:

What is the Commission doing to ensure that telephone rates in high cost rural areas are maintained at a level comparable with that charged in urban areas?

Answer

Approximately 26 percent of the nationwide cost of non-traffic sensitive (NTS) local exchange plant used in the provision of both interstate toll and intrastate services (local exchange service and intrastate toll) is allocated to the interstate jurisdiction. In December 1983, the Commission adopted a Joint Board recommendation in CC Docket No. 80-286, Amendment of Part 67, that provides for a 25 percent basic interstate allocator for NTS local exchange plant costs effective January 1, 1986, subject to an appropriate transition period. We also provided for a substantial amount of assistance for high cost telephone companies, which often operate in rural areas, by a Universal Service Fund (USF) to be paid for by the interstate carriers. The level of assistance for each local company will be based on a comparison of the company's unseparated (total interstate and intrastate) loop costs with the national average for these costs. Fifty percent of the relevant costs in excess of 115 percent of the national average will be covered by the USF, instead of local rates or customer line charges, with higher levels of coverage for costs in higher incremental cost bands.

In our January 1984 decision on further reconsideration in CC Docket No. 78-72, MTS and WATS Market Structure Inquiry, we concluded that the level of assistance for small telephone companies may have to be increased. We have requested additional comments on this issue as well as other matters related to customer line charges, and have asked the Federal-State Joint Board, composed of four state commissioners and three FCC commissioners, to prepare recommendations on these issues by November 15, 1985.

A principal issue in the MTS and WATS Market Structure Inquiry is how best to provide for the recovery of local exchange plant allocated to the interstate jurisdiction. We have identified four basic goals to be served by any plan for recovering the interstate allocation of local exchange costs: (1) preservation of universal service; (2) the elimination of unlawful discrimination in telephone rates; (3) the promotion of network efficiency; and (4) the prevention of uneconomic bypass of the local exchange. Based on the substantial record in this proceeding, we have found that the economic inefficiency and the incentives for bypass of the local network inherent in the existing system of recovering NTS costs from usage charges on toll services (known as toll loading) represent a serious long term threat to universal service and the preservation of a technologically advanced public switched network. We are convinced that the present level of toll loading must be reduced. In this context, while the Joint Board and the Commission are still studying issues related to the method for recovery of NTS local exchange costs which best serves the public interest, it is important to emphasize that the Commission is firmly committed to providing the assistance necessary for telephone subscribers in high cost areas and, more generally, to preserving universal service.

Question No. 5:

What is the Commission's policy on toll rate averaging, and where is this policy stated?

Answer

The Commission has never formally adopted rate averaging as a policy. Rather, it has permitted AT&T's historic practice of nationwide geographic averaging of toll rates for switched services, and on several occasions rejected particular rate deaveraging attempts as unreasonable discrimination. The Commission recognizes the benefits of rate averaging to many areas of the nation and is committed to examining closely the justification for, and effects of, any proposed tariff involving deaveraging rates. This policy is noted in numerous Commission decisions. *E.g.*, *Private Line Rate Structure and Volume Discount Practices*, FCC 84-147, released April 24, 1984, at para. 5 n.9; *Establishment of Domestic Communications-Satellite Facilities by Non-Governmental Entities*, 35 FCC 2d 844 (1972); *MTS and WATS Market Structure* (Report and Third Supplemental Notice), 81 FCC 2d 177, 188-195 (1980).

Question No. 6:

What will the Commission do if a request is made to move away from averaging toll rates?

Answer

The Commission noted in its *Access Charge Reconsideration* decision at paragraph 143 that "we would not permit any deaveraged MTS rates without completing a full policy and impact review of such a fundamental pricing shift." See also the answer to Question 5.

Question No. 7:

What assumptions were made by AT&T and Wharton Consulting in their study which states that, among other things, taking subsidies out of long-distance rates would create 400,000 new jobs, a new wealth in society at all levels, decrease the national debt by $21 billion (due to increased tax receipts), and reduce the costs of goods and services in the nation by 1 percent?

Answer

The study by Wharton Associates was prepared by consultants independent of the Commission and without any involvement by, or direction from, the Commission. Information with regard to the assumptions, parameters, adjustments, and outputs of the econometric model cannot be provided by the Commission, but rather should be obtained from Wharton Associates.

Question No. 8:

Do you believe that the elasticity of demand for telephone services is constant for business of all sizes? If so, on what basis do you reach this conclusion?

Answer

We do not have information relating the demand elasticity to size of a business. In our Public Notice of July 12, 1984, however, we did solicit comments on this particular issue. We will forward to you any information we receive in response to our *Public Notice* regarding the relationship between business size and its demand for telephone service.

Question No. 9:

Does the FCC plan on doing its own, independently financed study on the effects of access charges?

Answer

We are aware of several studies which have been conducted regarding the effects of customer line charges, and we are requesting that these studies be entered in the record in the CC Docket 78-72 proceeding. Moreover, pertaining to small businesses, Commission staff is meeting with representatives of the Committee on Small Business and the General Accounting Office to discuss a study of the effects on small business of recent Commission decisions proposed in Congressman Wyden's letter of July 3.

I trust that you will find the above responsive to your inquiries. If you need more information, we will be happy to provide it.

Sincerely,

Mark S. Fowler
Chairman

NFIB® National Federation
of Independent Business

The Guardian of Small Business

August 9, 1984

Honorable Vin Weber
U.S. House of Representatives
Washington, D.C. 20515

Dear Congressman:

Enclosed are my responses to your follow-up questions regarding my testimony before the Small Business Telephone Task Force on June 26.

Q1) How many small businesses are adversely affected by access charges?

R1) Over 60% of the respondents to our survey of NFIB members indicated that they had more than one telephone line. These small businessmen and women are paying a new charge of up to $6.00 per line per month for interstate access fees alone. Combined with the other new cost increases that have evolved post-divestiture, access charges are a substantial burden to place on small business. Since access charges have only been in effect for two billing periods, it is too early to tell just how many small businesses will be adversely affected to the extent that they discontinue or decrease telephone service. However, the NFIB report Problems and Priorities, which gives the results of our members' prioritization of seventy-two issues of concern to small business, shows that rising telephone costs rank fourth on the list of seventy-two. It is costs such as these--costs that a small businessman has no control over short of curtailing his business activities--that make it tough for small business to survive.

Q2) Please comment upon Chairman Fowler's assumption that the elasticity of telephone demand for all sizes of businesses is constant.

Wilson S. Johnson
Chairman of the Board and Director
National Federation
of Independent Business

John E. Sloan, Jr.
President, Chief Executive Officer and Director
National Federation
of Independent Business

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Vice President and Director
Indiana Manufacturers
Supply Co., Inc.
Indianapolis, Indiana

Bruno J. Mauer
Vice President and Director
Rickert Industrial Supply
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Bruce G. Fielding, CPA
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Jerry J. Chicone, Jr.
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James S. Herr
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Herr's Potato Chips, Inc.
Nottingham, Pennsylvania

Gordon L. Stone
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Stonehouse Signs, Inc.
Arvada, Colorado

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General Manager
National Federation
of Independent Business

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600 Maryland Avenue, S.W.
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R2) Certainly an average elasticity of telephone demand can be calculated from telephone demand elasticities pertaining to various businesses. However, it is not accurate to say that that average applies equally to all businesses, and it is especially inaccurate in this case because Chairman Fowler cites the Perl study, which was a study of only residential telephone customers.

Q3) In the hearing, you alluded to two misconceptions found in the current FCC access charge. These included the fact that most small businesses don't have to pay the access charge, since they qualify for the one-line business exemption, and that these access charges will be off-set by new, lower, interstate phone rates. Could you please explain and expand upon these and other misconceptions?

R3) If the exemption of one-line business customers from access charges is meant to protect small business users who cannot afford sudden increases in their cost of doing business, then the exemption is inadequate because it does not cover a large portion of these customers. It may be useful at this point to reiterate that NFIB unfortunately did not have this vital information concerning telephone usage by small businesses until well after the FCC had initiated the access charge proceedings. We were remiss in that regard. However, once telephone rates were perceived to be a new and major concern of our members, we gathered as much information as quickly as we could, and we are continuing to do so.

Our ignorance notwithstanding, though, we quite frankly cannot understand why the FCC did not put forth more effort to study the effect that access charges would have on small business. The fact that Chairman Fowler testified at the first hearing held by the Small Business Telephone Task Force that the results of the Perl study, a study of residential customers, were applicable to all small businesses illustrates the lack of consideration for small business that went into the development of the access charge plan by the FCC.

The second misperception upon which the exemption of one-line business customers was based is that other business customers will benefit from lower interstate telephone rates made possible by the access charge plan and, therefore, will not be

R3 cont.)
overly burdened by access charges. This may be true for large businesses, but our survey shows that small businesses use little if any interstate service. Nearly two-thirds of the respondents indicated that less than half of their phone bills were long-distance charges, and furthermore, over half of their long-distance calls were intrastate rather than interstate. Clearly, there will be no "offset" for access charges to small business, and in addition, small business will pay for the reduced interstate rates that large businesses will enjoy.

Q4) Please comment on the Perl Study as it affects small business. Was this study based on valid data?

R4) The Perl study was a study of residential telephone customers only. There is little if any basis for applying the Perl study findings to small business.

Thank you for the opportunity to add these comments to the hearing record. Please do not hesitate to contact me again if you feel I can be of assistance as the Task Force continues its review of the cost of telephone service to small business.

Sincerely,

John

John J. Motley, III
Director of Federal Legislation

JJM:khl
1157D

Appendix B.--Questions to Northwestern Bell and Their Responses

Northwestern Bell
909 High Street
Des Moines, Iowa 50309
Phone (515) 286-5471

Thomas D. Smith
Vice President and
Chief Executive Officer
Iowa

August 7, 1984

Representative Ron Wyden
Chairman, Special Task Force on Telephones
Congress of the United States
House of Representatives
2361 Rayburn House Office Bldg.
Washington, D. C. 20515

Dear Chairman Wyden:

Thank you for the invitation to appear before your Special Task Force on Telephones. I appreciate the opportunity to speak on behalf of our industry.

The attached information is in response to your letter dated July 3, requesting a detailed breakdown of Non-Traffic Sensitive (NTS) costs. We have tried to be as specific as possible, and I trust this information will be helpful to you.

Mr. Dick Bruner, of my Staff, has been in contact with Kent Hall. Please call him on (515) 286-5448 if you have any questions or need additional information.

Sincerely,

Smith

Attachment

QUESTIONS AND ANSWERS

Q. Are spare loops considered a part of NTS costs?

A. Yes. The cost of providing spare capacity is identified with each of our revenue producing loops.

Q. If so, how does Northwestern Bell determine the level of excess capacity to build into the system?

A. The sizing and timing of Outside Plant (OSP) investments is determined through the use of sophisticated computer programs. (EFRAP) Exchange Feeder Route Analysis Program is used by the outside plant engineer to develop a fundamental plan for cable and supporting conduit structure for an entire feeder cable network. (LFAS) Loop Feeder Administration System mechanizes the tasks involved in feeder administration. (PLUM) PLant Utilization Measurement/Pair Available Increase Requirement is a management system for monitoring and controlling future feeder plant utilization.

Computer programs are used to build additional capacity into the telephone distribution system. The economic selection process takes into account our mandated "Readiness to Serve" objectives balanced against economic placements. Our "Readiness to Serve" objectives include regulatory requirements and customer expectations regarding installation, maintenance and repair. Our engineers take into account all of the above considerations to construct the proper cable size and technology in order to provide the most economic design. Under this process the additional capacity is kept in equilibrium with our customer expectations and regulatory requirements.

Part of NWB's "Readiness to Serve" objective is set by the Iowa Commission's rules. One of its rules [22.3(1)] requires that all customer requests for new or upgraded service be processed within 30 days or that the failure be reported to the Commission. Another Commission rule [22.3(3)] limits multiparty service. Other rules require that adequate service be maintained and emergency service be available. Maintenance standards are set forth in Commission rules, as well as standards for quality of service. Compliance with these rules requires a larger investment in outside plant than if no minimum standards were present.

More importantly our customers set even higher standards. For example, while Commission rules require that orders for service be processed within 30 days, few, if any, Iowans would be willing to wait a month for telephone service. They expect and receive better and faster service. Currently NWB averages 2 days to install service. This customer demand requires a greater investment in telephone facilities than if service requests were delayed for long periods.

Similarly, our customers expect and receive timely repair service. Currently, 82 percent of our out of service customers who call before 5 p.m. receive repair of their service the same day. Quite often prompt repair requires the use of additional outside plant facilities.

Our computer programs require and evaluate numerous inputs. Some of these include:

- forecasted growth
- current and past development projections
- method of placement (buried, underground, aerial, carrier)
- placing restrictions (public and private rights of way)
- geographical terrain
- cable size availability
- labor and material costs
- rearrangement and maintenance requirements and associated costs
- costs of money

The computer program evaluates the economics of placing a large cable at the initial required placement date rather than adding several smaller cables at different intervals during a planning period. It selects the most economical method and timing of placements.

The management team of a telephone company reviews the computer's recommendations and determines appropriate placements.

The most significant expenses related to outside plant are those affected by labor. The relatively high cost of labor, as opposed to material cost, drives the economic decision to place larger cables initially, as opposed to several placements of smaller cables over the planning period. In other words, the carrying charges on larger facilities, even if not completely used, initially are less than the costs of multiple facility placements. This results in lower rates for customers.

This process provides Northwestern Bell the capability to determine plant placements that provide the customer with services they demand, when needed, at the lowest overall cost.

Q. How many spare loops exist in the Northwestern Bell system in Iowa?

The number of spare loops available is difficult to determine since the facilities are dynamic with customers entering and leaving the network. A loop which is available today may be utilized next month. This occurs because of normal customer movement and growth. Similarly, some loop use is cyclical and can distort figures drastically. Obvious examples are resort areas and universities. Less obvious examples are special events which create large, short run demand like the Iowa Caucuses and the Iowa State Fair. As such, to present a number which fully represents the number of loops available for use, could be both misleading and confusing.

Q. What portion of NTS costs fall into the following categories?

A. While Northwestern Bell (NWB) does not group its costs into the categories specified in your letter, we do include all costs you have identified in our components. The following components (categories) make up NWB Non-Traffic Sensitive (NTS) business costs in Iowa:

Component	Monthly Cost
Depreciation	$ 5.72
Return	8.97
Ad Valorem Tax	1.83
Federal and State Income Tax	6.15
Administration	2.81
Maintenance	3.43
Accounting and Billing	.85
Commercial, Marketing and Directory	2.27
Common Overheads	2.96
Total NTS Costs	$34.99

Managerial and utility costs are not specifically identified since these costs are directly assigned to the listed cost components. For instance, management and utility costs associated with the access line maintenance forces are assigned to the maintenance cost components. Likewise, the Administration, Commercial-Marketing and Accounting costs components also contain some managerial and utility costs as does the common overheads component to which executive, legal, and advertising costs are assigned.

Appendix C.--Questions to MCI Communications Corp. and Their Responses

MCI
Communications
Corporation
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Washington, DC 20036
202 887 2754

Eugene Eidenberg
Senior Vice President
Regulatory and Public Policy

MCI

July 11, 1984

The Honorable Ron Wyden
Chairman, Special Task Force
on Telephones
Committee on Small Business
2361 Rayburn House Office Building
Washington, D. C. 20515

Dear Ron:

Thank you for your recent letter. I do appreciate the opportunity to have appeared before the Task Force and to provide the further information you requested.

The Federal Communications Commission, in its consideration of whether and how to implement access charges for single line business and residential customers, has been receiving alternative proposals from state utility commissions and some local telephone companies. The common thread of these proposals is that the FCC -- instead of implementing nation-wide, uniform per-line access charges for business and residential customers -- should simply allocate non-traffic sensitive costs to the states which would then determine under Federal guidelines how best to recover those costs from customers and carriers. This would permit, for instance, a state commission to impose lower access charges on rural customers than on urban and suburban customers and to otherwise fine tune the access charge system depending on conditions within the state. I have previously provided to Lois Davis of your staff copies of a resolution adopted by the National Association of Regulatory Utility Commissioners and a filing by the Vermont Department of Public Service which set forth some details of these proposals.

MCI continues to believe that the FCC's access charge plan is the most equitable and efficient method for dealing with very real problems associated with the current mechanisms for assignment of NTS costs. Obviously, we are but one participant in this public policy debate, and, of course, would consider the relative merits of alternative proposals.

From MCI's perspective, the reasonableness of the alternatives discussed above will depend entirely on the guidelines the FCC would establish for recovery by the states of NTS costs. Any proposal, for instance, that would permit a state to continue recovering all NTS costs through charges on interexchange carriers would do nothing about the fundamental issues addressed in the FCC's access charge plan and would therefore be unacceptable.

Another essential element of the FCC's plan which should be included in any guidelines is the differential in carrier access charges to reflect differences in the quality of access until equal access is provided by local telephone companies. Furthermore, we believe that the states should be required to follow established Federal policy by permitting intrastate, interexchange competition.

As you can see, these and other guidelines which may be developed would allow states substantial discretion in coming up with individual methods for recovering costs from carriers and business and residential customers while preserving the essential principles of the FCC plan to ensure universal service.

I would be very pleased to discuss these matters with you further.

Sincerely,

Gene

Eugene Eidenberg

F.6 St. Louis Res.

The St. Louis Resolution
(Communication Allocations and Access Charges)

RESOLVED, That the Committee on Communications of the National Association of Regulatory Utility Commissioners (NARUC) reaffirms its commitment that the Federal-State Joint Board is the appropriate mechanism to determine the interstate allocation of toll costs; and adopts the following position:

1. State commissions shall recover, under a single set of access charge tariffs, interstate costs allocated by the Joint Board for all interexchange use of local plant within each State;

2. Interstate access charge rate levels shall be set and tariffs administered by the State commissions in compliance with Federal guidelines recommended by the Joint Board and approved by the Federal Communications Commission;

3. The suggested Federal guidelines are:

   a. A cap on non-traffic sensitive (NTS) costs which may be levied on interstate interexchange services for access to the local exchange;

   b. Charges shall not discriminate against interstate, interexchange service;

   c. Charges shall not discriminate between different interexchange carriers utilizing the same services or facilities;

   d. Charges shall not encourage uneconomic bypass; and

   e. Charges shall promote universal service;

4. An aggrieved party may petition the Joint Board for review of a State commission action for failure to follow the above guidelines.

Adopted May 8, 1984

MCI 1:1

HALEY, [illegible] & POTT
MAY 17 1984
WAS...

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D. C. 20554

In the Matter of)
)
MTS and WATS Market Structure) CC Docket No. 78-72
)
Amendment of Part 67 of the) CC Docket No. 80-286
Commission's Rules and)
Establishment of a Joint Board)

COMMENTS ON END-USER ACCESS CHARGES

The Vermont Public Service Board (VPSB) and the Vermont Department of Public Service (DPS) offer the following comments on the allocation of NTS costs and access charging.

Allocation of NTS Costs and Access Charging

1. The Separations and Settlements process is an anachronism in a divested, competitive environment. This process was a means of assigning costs between intrastate and interstate customers as well as between affiliates (AT&T and the Operating Companies). In the absence of that affiliate relationship and in the presence of competition it is time to design a process which addresses today's issues and environment.

2. One goal to be achieved by any access charging scheme is to devise a mechanism which will properly determine what level, if any, of non-traffic sensitive costs (NTS) can be borne by interLATA customers on a minutes-of-use basis, whether on an average or declining block basis. The FCC has

attempted to make this determination by a CALC or end-user charge paid per customer as a prerequisite to using any portion of the telephone network, assigning none of these costs to interLATA customers on a minutes-of-use basis.

3. There are at least two major reasons why the FCC should not set a flat access charge. First, it substantially reduces state flexibility in designing basic exchange rates. From a pricing perspective, the flat access charge is functionally an additional basic exchange charge, and therefore reduces the ability of the states to assess more intrastate costs to local service. Second, there are clearly regional and state, if not intrastate, differences in costs, usage patterns and bypass threats that the FCC simply cannot reflect. For instance, a state with relatively high local rates and low likelihood of bypass might want to assess more NTS costs to interexchange carriers than a state facing the opposite conditions, whereas the flat access charge precludes this action. Though states are increasingly limited in the services that they can price, the creativity shown by the Florida Commission in its recent intrastate-interLATA access charge order is an indication of the kinds of pricing that can reflect the specific needs of the state. It is not enough, however, to say that the FCC should not set end user charges without acknowledging that there needs to be a mechanism other than separations and settlements to determine a level of NTS costs to be borne by interLATA customers on a minutes-of-use

basis. It is our position that the states and the market should make this determination, as long as certain conditions are met.

4. An access charge scheme must accommodate the competing obligations of (1) the preservation of universal service and (2) the avoidance of detrimental or "uneconomic" bypass. Detrimental bypass could be defined as the loss of revenues, through lower consumption, without an equivalent reduction in costs. These goals compete to the extent that reduced charges to high-volume customers (necessary to keep these customers on the system) must be made up by increased charges to low-volume customers.

5. There are two aspects to this fundamental issue. The first aspect involves setting access charges to be assessed on interstate and intrastate interexchange carriers. The second aspect relates to the manner in which these access charges are collected from interexchange customers. The former might be thought of as a wholesale or cost of service issue and the latter as a retail or rate design issue. In one sense, the cost of service aspect has been addressed through the Joint Board proceedings in docket 80-286 and the retail aspect in Docket 78-82. One point remains clear: the issue of how best to harmonize the goals of universal service and avoidance of bypass cannot be resolved unless both the costing and pricing aspects are addressed in tandem.

6. Within the costing aspect, several issues must be resolved. Most important, the level of total costs, particularly NTS costs, allocated to interexchange carriers must be set. At least with respect to NTS costs, economic theories fail to provide any one correct answer. The extent to which costs assessed to interexchange carriers should be pooled among LATAs and among states must also be addressed. In addition, different treatment of incumbent carriers and OCCs (i.e., access charge discounts) should be evaluated.

7. Similar issues must be addressed with respect to the pricing aspect. The most fundamental issue involves the proportion of NTS costs which should be recovered through minutes-of-use rates. Whether interexchange carriers should be allowed flexibility in pricing their services should also be considered. Given flexibility, carriers might respond by deaveraging rates and/or instituting volume discounts. States must also address the extent to which intrastate competition should be allowed.

8. Most states--those with multiple LATAs--have been required to address both the wholesale and retail aspects of the issue in the context of setting intrastate interexchange access charges. The experiences of the states show a wide range of solutions tailored to reflect the specific needs of the state, and reconciled often conflicting needs.

9. We offer the following proposal.

a. No separation of NTS or TS costs to the interstate or federal jurisdiction. The authority to determine the method of recovery of all NTS and TS costs would be delegated to state jurisdiction. The separations and settlements process would simply be eliminated.

b. The operating companies would propose to the state regulatory agencies originating and/or terminating access charges to be assessed to the interLATA carriers. These access charges, to be approved by the state commission, could be subject to some overall FCC "guidelines," or subject to review by the FCC/Joint Board.

c. Interexchange carriers would be allowed more flexibility in the recovery of the access charges from interLATA customers, in order to reflect conditions unique to a particular state as well as competitive considerations. The FCC could not mandate "end-user" charge.

10. This plan would help balance the avoidance of uneconomic bypass and affordable universal service. It would reduce the level of bypass caused by assessment of NTS costs to interLATA customers in an amount greater than a competitive market would indicate. This protection would be provided at two levels. First, the state commission and the operating company would be cognizant of the bypass threat specific to their state when setting the access charges for the interLATA carriers. States and operating companies would be constrained by this concern in establishing rates.

11. More importantly, the interexchange carriers, given more freedom to charge market-priced rates for access, will be guided to a greater extent by considerations of the degree to which various classes of customers can absorb NTS costs. Assuming significant competition in the interexchange market, there should be an array of pricing plans. For example, if AT&T announces that all of the access charges assessed to it by an operating company will be charged at a flat fee, its competitors might make a marketing decision to provide alternative pricing proposals that recover some NTS costs on a flat basis and some on minutes-of-use.

12. The initial access charge determination by the operating company and the pricing schemes of the OCCs should more accurately reflect the interests of states concerned about the preservation of affordable telecommunications services and the interexchange carriers concerned about customers continuing to purchase interexchange services. States would have authority to determine whether customers would be allowed to subscribe solely to interexchange service or local service. A market tension would be created which would inhibit the OCC's from overcharging flat fees if they excluded customers who otherwise might make some calls, and encouraging them to spread some NTS costs, perhaps heavily, in the early minutes-of-use.

13. This proposal may result in increased pressur for deaveraging of interLATA rates since interLATA carrie

might be charged different access charges within each jurisdiction. Vermont has strongly opposed deaveraging of interLATA rates because it has not yet attracted competition and there has been no assurance that deaveraging won't result in overcharging on non-competitive routes. Deaveraging that results in different prices for different geographic areas of the country (geographic deaveraging) would presumably raise Vermont's aggregate interLATA charges at a time when it would have to absorb some of the highest ($16 per line/month) cost reallocations brought about by separations and access charge decisions. In addition, geographic deaveraging results in _de facto_ deregulation of interLATA charges throughout the country because there is no acceptable nor feasible method to assure that the charges for each route are based on costs. On the other hand, we are not necessarily opposed to deaveraging in the form of volume discounts, available to all customers in all geographic areas, as long as the resulting rates bear a reasonable relationship to costs. We are confident that safeguards can be developed which would reduce the pressure for deaveraging caused by our access charge plan.

14. There are no legal impediments under the 1934 Communications Act nor _Smith v. Illinois Bell Telephone_ to implementing this proposal. Two sections of the Communications Act of 1934 (47 U.S.C. §§151 _et seq._) address the issue of separations. Section 221(c) provides that "the Commission _may_ classify the property of any . . . carrier used

for wire telephone communication, and determine what property of said carrier shall be considered as used in interstate or foreign telephone toll service." (Emphasis added.) Separations is discretionary function of the FCC, not a requirement under the Communications Act.

15. Section 410(c) describes the process by which the FCC refers separations proceedings to the Federal-State Joint Board (composed of three members of the FCC and four state commissioners nominated by NARUC) to make recommendations on separations to the FCC, and does not require the FCC to implement separations, nor prohibit any delegation of this responsibility.

16. Nothing in either of these two sections prevents the FCC from either delegating its authority over separations issues to the states nor preventing the states from implementing access charges to recover appropriate costs from the interstate carriers.

17. Nothing in the Supreme Court's ruling in Smith v. Illinois Bell Telephone 282 U.S. 133 (1930) presents any impediment to the proposal. The ultimate requirement in Smith is that costs be allocated between the interstate and intrastate customers and that the allocation be done on a reasonable basis with consideration given to the use of the plant. It is clear that this requirement can be satisfied by state- and operating company-developed access charges. Clearly these access charges would result in an apportionment

of some costs to interstate carriers and translated into rates for customers who use the interstate system.

18. In conclusion, operating companies and states are uniquely positioned to fashion access charges. The states have gained experience in these issues through their intrastate interLATA access charge proceedings. They have approached the problem in various ways, with most states not "mirroring" the FCC's initial decision. These creative solutions reflect the needs of the individual operating companies and the states. The operating companies will be better served by a method that can reflect their competitive situation than by one uniform national method which of necessity must compromise the needs of the states.

Respectfully submitted,
Vermont Public Service Board

BY: V. Louise McCarren
V. Louise McCarren, Chairman
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Vermont Department of Public Service

BY: Peter H. Zamore
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Dated: May 11, 1984

Appendix D.--Questions to AT&T and Their Responses

AT&T

W. W. Betteridge

550 Madison Avenue
New York, NY 10022

July 24, 1984

The Honorable Ron Wyden
House of Representatives
Washington, D.C. 20515

Dear Mr. Wyden:

This is in response to your letter of July 3, 1984.

We know that various parties including the FCC are studying possible alternatives or modifications to the FCC's Access Charge Plan. At this time we have no specific suggestions to offer. Detailed data as to costs used in the development and analysis of any alternative proposals would of necessity come from the exchange carriers themselves. Any charge plan is, of course, aimed at recovery of exchange costs by the exchange carriers through their tariffs.

It is generally agreed that the system of pricing to achieve social goals which had been developed in a regulated monopoly environment must be changed with the advent and development of competition. The effect of competition will inevitably be to drive prices closer to costs. There are, of course, concerns about the transition to such prices. The FCC's plan was designed to recognize the need for change, provide a reasonable transition for customers and carriers, and make certain that the truly needy are not hurt. If other plans are developed and proposed, with these general objectives in mind, we would be interested in evaluating any such plans.

While we know of various cases where bypass has or will take place, any specific data on the effects of bypass on the revenues, costs, and rates of the local exchange carriers would be known only to those carriers. We regret that such information is not available to AT&T.

There are other possible sources of information you may wish to consider. Various studies have been presented by the exchange carriers in state regulatory proceedings, including studies by Touche Ross for a number of carriers and states. The growth of interest and activity on bypass has resulted in a monthly periodical devoted solely to this field, Telephone Bypass News, published by Telestrategies Publishing, Inc. of McLean, Virginia. The FCC is, of course, continuing its study of bypass and may receive information from other sources.

Thank you and your committee for the opportunity to present our views in your Task Force hearings.

Sincerely,

W. W. Betteridge

Appendix E.--Prepared Statement of GTE

GTE

GTE Corporation

C. Russell Campbell, Jr.
Assistant Vice President-Legislative Affairs

1120 Connecticut Avenue, N.W.
Washington, D.C. 20036
202 463-5220

June 25, 1984

Honorable Ron Wyden, Chairman
Telephone Task Force
Committee on Small Business
House of Representatives
Congress of the United States
Washington, D.C. 20515

Dear Congressman Wyden:

This is in response to your invitations to Mr. Theodore F. Brophy, Chairman and Chief Executive Officer, GTE Corporation, and Mr. Dale F. Pilz, President, GTE Sprint Communications Corporation to testify before the Committee on Small Business' Telephone Task Force. In lieu of a GTE representative appearing before the Committee, we herewith submit a statement for the record on the issues enumerated in your letter of June 8, 1984.

Respectfully,

C R Campbell Jr

C. Russell Campbell, Jr.
Assistant Vice President -
Legislative Affairs

STATEMENT OF GTE CORPORATION
Before The
COMMITTEE ON SMALL BUSINESS
(TELEPHONE TASK FORCE)
U.S. HOUSE OF REPRESENTATIVES
June 26, 1984

GTE Corporation appreciates the opportunity to submit this statement which discusses the three issues mentioned in the letter from the Honorable Ron Wyden, Chairman, Telephone Task Force, soliciting an assessment of the impact of the customer line charges on small businesses.

Introduction

In the past few years, there has been a virtual revolution in the telecommunications industry. A regulated industry is being transformed into one in which the rigors of tough and creative competition, dictated by discriminating and cost conscious consumer demand, will mold the services and facilities that are made available to American consumers, business and residential alike. New business opportunities, service options, and equipment choices never before possible will become common-place in almost every segment of the telecommunications industry if competition is permitted to be the rule of the day.

This radical change requires a period of careful transition. The success of this transition is dependent upon striking a proper balance between competition and the reduction of regulation. Moving to a competitive industry in which charges must be cost-based requires changes in the way we are used to doing things and some disruption is inevitable.

GTE Corporation's View of End User Charges

There appears to be some concern about the possible effect on small businesses of the implementation on May 25, 1984, of customer line charges under the interstate access charge plan of the Federal Communications Commission (FCC). GTE believes this concern is misplaced.

GTE has supported the direction of the FCC plan as the most reasonable, balanced plan to begin recognition of the thorny dilemma posed by the need to remove the subsidy of the fixed costs of subscriber access from the rates of interexchange carriers and support those costs by the general body of ratepayers whose access to the integrated public switched network has caused those costs.

These "non-traffic sensitive" (NTS) costs arise from the investment and expense of the fixed facilities which connect a customer (or "end user") with the switching equipment at the central office or wire center of a local exchange carrier.

Avoiding customer line charges entirely through maintenance of the current NTS subsidy for interexchange carriers is not a desirable policy. Both interexchange carriers and large end users would have substantial motivation to engage in uneconomic bypass of the facilities of local exchange carriers. The resulting revenue diversion, and the need to finance an embedded revenue requirement, will put upward pressure on the rates of the local exchange carrier and threaten marginal consumers. The simple fact is that uneconomic bypass is a wasteful investment of society's scarce resources in an unneeded, duplicative capacity. Following a policy that unnecessarily uses up resources to produce a given set of outputs reduces the ability of small businesses to survive in the competitive marketplace.

The incentive for uneconomic bypass exists as long as NTS costs are inappropriately recovered through switched access charges to interexchange carriers. The alternative bypass facilities which are constructed by the exchange carrier or any other entity are not least-cost, but they appear to be priced lower than switched access because of the artificially inflated switched access charge. Economic rationality demands that the price customers pay for a good or service should equal the real resource cost of producing that output.

The problem of uneconomic bypass is further exacerbated by the problem of regulatory lag, wherein regulatory bodies may not allow timely rate increases that permit bypassed exchange carriers to meet their revenue requirements. This regulatory lag, particularly if coupled with any inadequate capital recovery, results in an adverse cash flow impact for the exchange carriers and places strictures on their ability to finance modernization programs which would otherwise increase their competitiveness.

To capture what revenue streams they can, the exchange carriers may resort to bypassing themselves in order to retain large business customers. Exchange carriers are already, or will shortly, be utilizing cellular radio technology, digital termination systems (DTS) and point-to-point microwave. In the long run, those technologies will be able to substitute for the public switched network (PSN) both within the exchange itself (cellular radio for the local loop) and on the high volume, point-to-point routes between the customer's premises and an interexchange carrier's (IXC) Point of Presence.

The customers served by the new forms of high capacity facilities will have larger communications needs, and their business operations will be characterized by both size and diversification. By contrast, the small business customers remaining on the PSN would be characterized as relatively smaller in size and scope of operations, and also by a more narrow and basic set of communications needs. The composition of the remaining PSN customers, therefore, would consist of residences and small businesses whose relatively low volumes and need for broad coverage in effect binds them to a PSN that may decline in quality. An incentive for coalitions to form among small users will exist, to enable larger groupings to take advantage of bulk offerings for particular routes. Nevertheless, for those customers who remain on the public switched network and whose traffic volumes or patterns preclude such combinations for most of their calling, the situation is bleak.

While the suggestion that a distortion in the price structure for small businesses would appear to be in their immediate interest, the long-term implications for such customers are disconcerting: (1) a deterioration in the quality of service and (2) an increase in the price of that service. GTE firmly believes that small businesses and the general consumer welfare will be best served by a movement toward rational, cost-based pricing.

Impact of Access Charges

The FCC has stated four primary goals it hopes to achieve with end user charges:

(1) To eliminate the discrimination or preferences that result from the inconsistent methods that have been used to recover interstate subscriber loop and private line loop costs;

(2) To promote economic efficiency by eliminating the distortion that inevitably results from the recovery of fixed costs through usage charges;

(3) To deter uneconomic bypass by removing the incentive for large users to substitute bypass facilities that may be more costly than the local distribution facilities of the telephone companies; and

(4) To preserve universal telephone service by avoiding rate increases for remaining telephone company customers that would result from uneconomic bypass.

The direction of the Commission's proposals with respect to customer charges are both realistic and necessary if we are to preserve what has taken us so long to achieve, universal telephone service at a reasonable price. In a regulated industry, policy-makers have the luxury of providing for cross subsidies to achieve particular political or social goals. But once a determination is made to move to a competitive system, cross subsidies are not only undesirable, they are downright harmful. They send false pricing signals and foster uneconomic incentives which waste scarce resources and punish other otherwise efficient service providers. It is therefore critical that competitive markets rely on cost-based pricing to prevent these ill effects.

An increase of $6.00 per month per line, at first blush, may appear to be a burdensome increase for local service for a small business. As noted below, the actual average increase is only $3.74 for GTE's small business customers. But access charges must be examined not only in the context of the ramifications of not imposing them, but also in regard to other pricing and service opportunities that have and will continue to accompany deregulation of the telephone business.

This is supported by the fact that few small businesses limit their use of the telephone to local calling. Calls to suppliers or customers in other cities or states, for example, often require the use of the long distance network. And many businesses, large and small alike, will be turning to the national telecommunications network for the transfer of financial, technical and other commercial data, as well as to access centralized information bases. There is a national trend toward increased reliance on, and use of, the long distance network for day-to-day commercial transactions.

With respect to the question of the impact of access charges on business customers, GTE does not have a definitive breakdown of its billing accounts by type and size of business customers. In addition, at the present time, the multi-line business access charge has only been in effect since May 25 and has appeared on only about half of the business customers' bills. Nevertheless, the indication so far is that of the more than 500,000 multi-line business end-user access charges which GTE Telephone Companies have billed, a disconnection of only 41 lines because of the access charge has been observed.

Although one effect of an end-user charge clearly is an increase in the price of telephone service, it may be offset by the value of the May 25th reduction in AT&T's interstate message toll rates. A customer who averages 15 minutes of interstate calling per line each business day (i.e. 300 minutes per month) will experience a reduction in his telephone bill when the access charge is $6.00 per line. In more than half of the states in which GTE telephone companies operate, the access charge is less than $6.00. The average access charge per line for GTE's multi-line business customers is $5.34 per month.

A sample of the usage of customers with small multi-line telephone systems indicates that the average interstate calling volume is on the order of 80 minutes per line per month. Based on the reduction of two cents per minute on the average interstate long distance call, the saving for a small business customer is $1.60 per month. The effect of the average access charge and this saving results in only a $3.74 net increase per line in the typical small customer's telephone bill. This is only the first order effect and does not consider the benefit of increased traffic stimulation from the interstate rate reduction. Furthermore, if the entire subsidy of NTS costs were removed from interstate carriers, the resulting rate reduction which could be expected would offset the access charge for any customer using only 50 minutes of interstate toll per line per month. This is true because the national average revenue requirement per line for non-traffic sensitive costs allocated to interstate is approximately $5.00 per month and the carrier common line change per minute for each end of an interstate call is just over 5 cents per minute.

The number of companies offering long distance service has proliferated over the last several years and competition among them for new customers is fierce. An array of facilities-based and resale carriers vie for new business by offering reduced rates and special services tapered to meet customer's needs. The true flavor of competition and the benefits accruing to the public from that competition can best be illustrated by comparing GTE Sprint's rates with those of AT&T. At the rates prevailing during the business day, a GTE Sprint customer can expect savings of approximately 17 percent on long distance calls. At the average of 80 minutes of interstate calling per line noted above plus half that amount for calling which GTE Sprint is authorized to carry within the states, even a $6.00 end-user charge is completely offset. Moreover, even greater savings are experienced when business customers use the GTE Sprint Travel Card while away from their businesses as compared with AT&T's Calling Card rates.

Deregulation of the telephone industry has also made available to subscribers new opportunities to purchase, rather than lease, customer premises equipment and has put within the economic grasp of even small businesses technological options heretofore available only to the largest of users. A small business with a single line and two or three extensions which buys, rather than leases, its phones can easily save each month an amount in excess of the proposed single customer line charge. And the phones they buy can have sophisticated capabilities such as automatic redial, storage of frequently dialed numbers, etc.

The point is that the customer line charge has to be put in perspective with the benefits that are being achieved under the new competitive system. While many small businesses may consider the customer line charge difficult to swallow at first, there are many offsetting benefits that must also be taken into account. In the long term, the customer line charge will prevent severe pain from which there can then be no retreat. GTE urges the task force to keep this "bigger picture" in mind as it deliberates on these important issues.

Universal Telephone Service

GTE also believes that alternative methods exist that would have a further ameliorating influence on the market effects of shifting NTS costs to the cost causers and that would continue to foster the objective of universal telephone service. Alternatives such as usage sensitive service, local measured service or the reduction of the local calling area would signal movement toward a cost-based pricing system and would enable customers to respond more accurately to price structures by controlling usage. GTE is convinced there is an optimal price structure which can meet the needs of most users of the telephone network which reflect the costs of providing the service actually utilized by the customers.

Even so, such a cost-based pricing system could have an adverse effect on the decision of some marginal consumers to continue subscribing to access to the network. It is GTE's position that if the loss of marginal subscribers who were previously being subsidized is considered a socially undesirable consequence, then support should be provided in a manner other than financing it within the industry which would merely serve to increase further the requirement on small business customers to support universal telephone service.

Conclusion

GTE urges the Committee's Telephone Task Force to give full recognition and support to the direction of the FCC's access charge plan. GTE believes that the interests of small businesses are ultimately best served by movement towards cost based pricing. As demonstrated above, the net effect of the access charge, coupled with the decrease in AT&T's interstate toll rates, is $3.74 for the average GTE small business customer. This $3.74 increase can be further reduced by using the services offered by any one of the new interstate service providers.

Appendix F.--FCC Docket 78-72, Phase I, Third Report and Order, Appendix G

The Effect of Rate Increases on Universal Service

1. One characteristic of U.S. communications is the ubiquity of the telephone. Well over 90 percent of U.S. households have easy access to a telephone that can connect them with virtually anyone else in the country. The plan adopted in the *Order* could result in significant increases in the minimum cost of accessing telephone service. Before such a plan can be adopted, some idea about its effect on the availability of telephone service is desirable. This Appendix reviews some of the recent empirical studies of the relationship between price and availability.

2. A general law of economics holds that the quantity of any good that is purchased is related to the price charged. In general a higher price leads to lower consumption levels. The relationship between percentage changes in price and percentage changes in quantity is known as the elasticity of demand. Elasticities of demand are typically negative, but may vary significantly between products, and between different groups of consumers for the same product. A demand relationship that has an elasticity less than -1 (*i.e.*, that has an absolute value greater than 1) is termed "elastic." A demand function having an elasticity between 0 and -1 is termed "inelastic."

3. Goods that are fairly essential (*e.g.*, gasoline) or that involve a minor part of a more important whole (*e.g.*, a doorknob in a house) tend to be inelastic in demand. Goods that are used for less essential purposes (on the margin), especially those having close substitutes, tend to be more elastic in demand. Thus, while the demand for food is inelastic, demand for particular foods is less inelastic and demands for particular brands of a particular food even more elastic.

4. It is generally believed that the demand for telephone access is quite inelastic. Telephone service is viewed as an integral part of running a household or business and is a small element in either. It performs necessary functions, and has no very close substitute for many users. Those studies that have been undertaken confirm this belief. The studies that we have reviewed are uniform in finding inelastic demands. Most of the measures fall around -.1, that is, a 10 percent increase in price will lead to only a 1 percent reduction in the quantity purchased.

5. The elasticities calculated are not uniform among groups. As would be expected, the poor and minorities have somewhat higher elasticities. Richer and older groups tend to have even lower elasticities.

6. It should be noted that many of these studies consider number of lines as the dependent variable. It might be expected that those customers with several lines could subscribe to fewer lines, maintaining service availability, yet show an apparently high elasticity of demand. The effect of this, however, is difficult to quantify.

7. Any good econometric study attempts to give results that can be interpreted as the results that would occur if some change took place and everything else remained the same. Obviously, everything is not remaining the same. Two major changes in demography and in pricing make it unlikely that actual results will be as severe, as are those predicted by these studies.

8. First, the implementation of access charges is not a rate increase, it is a rate restructure. Increases in access rates will be matched dollar for dollar by reductions in per message interstate charges. These reductions in usage charges will make telephone access more valuable for two reasons. First, the parties purchasing access could make interstate calls more cheaply than would have been the case had past policies continued. Second, purchasers of access can expect to receive more or longer interstate calls than in the past because rates for their correspondents have dropped as well.

9. Second, the estimates were conducted given the then-existing income and population data. The trend of both of these statistics is upward. Thus, by the beginning of the transition that is required by the Third Report and Order, and even more so by the end, the population will be both richer (probably) and older (almost beyond doubt) as the baby boom generation moves higher on the income ladder and as that generation grows into the less price sensitive age groups.

10. The attached tables contain a variety of estimates of demand elasticities. All of these elasticities assume real dollar price changes. Thus, doubling telephone rates in an era when all prices (including income) also doubled should not change demand. To apply any of these estimates, therefore, either the predicted access charges should be deflated to reflect current dollars, or current local prices should be inflated to reflect future dollars.

11. The Order indicates that a transition is an essential ingredient in moving to cost-based rates. Since none of these studies contains a dynamic element, it might appear that the transition would have no effect on long run connection levels. This conclusion, however, is not necessarily correct. Many of the studies compare areas with high prices to areas with low prices at the same time. The differences in connection level would include some individuals who have never had phones and would connect if they knew the benefits from phone service. A gradual transition is likely to ease the burden on current users and to allow new users to join, in this way becoming familiar with the advantages attendant to telephone use. The transition might, therefore, affect the final outcome by affecting tastes--something that cannot be taken into account in these studies.

12. Thus far, the results of these studies could not be used to forecast changes in actual usage patterns. Indeed, many local pricing changes seem to be met by no reaction at all, or merely by a slowing of the rate at which new phones are ordered. Nevertheless, the results appear quite consistent among numerous studies, and the studies appear to have been conducted properly. Therefore, it seems reasonable to assume that there is some possibility of at least limited

disconnection as a result of the Order, and to study carefully the results of access charge on disconnection and on the maintenance of universal service.

13. In his work The Demand for Telephone Service: A Summary and Critique of the Literature, Lester D. Taylor summarizes elasticity estimates found in recent studies. One of his tables, which incorporates the result of his survey, is attached as table 1. Another study, undertaken by the New York Telephone Co. is attached as table 2. One of these studies, that by Perl, has received considerable attention and was cited during the DOJ/AT&T antitrust case as evidence that substantial price increases could lead to large declines in telephone penetration (See table 3). Because this study has received considerable attention, special consideration of this study appears appropriate.

14. The Perl study indicates that a 50 percent increase in basic rates would lead to a fall in the estimated percentage of households with basic telephone service from 91.52 percent to 88.15 percent, that a 100 percent increase in basic rates would result in a decline to 83.69 percent, and that a 200 percent increase would lead to a reduction to 70.92 percent.

15. Immediate implementation of a Pure 2 interstate access charge would be likely to require an increase in charges of somewhat over 50 percent of this base with cover charges (relative to the base) when CPE and embedded inside wire are removed from the rate base. If states also adopt a Pure 2 approach for intrastate access charges, roughly a 100 percent increase in typical rates would be experienced. Thus the Perl study would appear to predict a reduction in access from 91.52 percent to 88.65 percent for an interstate only Pure 2, and to 83.69 percent for a combined Pure 2.

16. Because these figures were based on the 1970 census, Perl was not able to take into account the increasing use of local telephone options other than basic service. Many jurisdictions now require or allow "lifeline" or measured use serivice. Such options allow those who wish access to receive it at a low cost, but require recovery of some costs on a usage basis. Such options might provide an alternative to disconnection for many customers.

17. All of the studies indicate that the income elasticity of telephone service (i.e., the percentage change in quantity with respect to a percentage change in income) is positive, but less than one. Income increases are likely to increase the total number of access lines, but this effect will be gradual. For the Perl study, at least, this result is subject to the constraint that no more than 100 percent of all households can have access. Thus large increases in income appear to be required to generate small increases in access. Since some households do not want phone service at any price (the costs of having to answer the phone exceeds the benefit of calls received) and others would be willing to pay virtually nothing no matter how rich they might become, these income elasticities should be understood to be constrained to a narrow range around the penetration level actually recorded. That is, lower penetration levels that result from substantial rate increases might raise income elasticities above those calculated.

18. We also attach data gathered from Maryland, the District of Columbia, West Virginia and Virginia. (Tables 4, 5, 6, and 7). These appear to support the conclusion that the effect of price is not strong. As can be seen, Virginia, where rates remained constant, had fewer residence lines in 1982 than in 1981, while in Maryland the number of residential lines increased despite substantial increases in local telephone prices. In the District of Columbia, prices rose on all services, yet the number of lines fell in one category only. The windfall came despite only a very slow growth in a very low-cost ($2.80) economy option. The price of this option did not increase substantially.

19. We also attach a paper prepared by the National Economic Research Associates, Inc. concerning the impact of various access prices on different demographic groups, that was forwarded to the Commission.

Table L

Table 3-1. Estimates of Price and Income Elasticities of the Demand for Access to the Telephone System

Class of Customer and Study	Dependent Variable	Price Elasticity: Service-Connection Charge	Price Elasticity: Basic Service Charge	Income Elasticity	Type of Data
Residential					
Alleman	main stations	NE	−0.17	0.56	CS: Cities, U.S.
Feldman	main stations plus extensions	NE	−0.05	0.54	CS: States, U.S.
Perl	telephone availability	−0.02	−0.08	0.15	CS: Households, U.S.
Rash	main stations	NE	−0.11	0.61	TS: A, Ontario and Quebec
Waverman	main stations	NE	−0.12	0.15	TS: A, Ontario and Quebec
Business					
Waverman	main stations	NE	−0.09	NE	TS: A, Ontario and Quebec
Residential & Business Combined					
Davis et al.	total telephones less residence main stations	NE	−0.08	0.39	TS: A, Bell System, U.S.
Waverman	main stations	−0.04	−0.06	0.56	TS: A, Sweden

Symbols: NE: not estimated; CS: cross-section; TS: time series; A: annual.

Table 2

NEW YORK TELEPHONE COMPANY
PIECE PART DEMAND MODEL FOR ACCESS

TIME SPAN: Q2/61 - Q4/81
FUNCTIONAL FORM: LOG

$$\begin{aligned} LnQ_t = {} & \underset{(.76822)}{3.3971} + \underset{(.07421)}{.61142}\,(LnQ_{t-1}) - \underset{(.01764)}{\underline{.04105}}\,(LnP_t) \\ & + \underset{(.02433)}{.04982}\,(LnY_t) + \underset{(.00002)}{.00009}\,(T_t^2) - \underset{(.0000005)}{.000002}\,(T_t^3) \\ & + \underset{(.000000003)}{.000000009}\,(T_t^4) - \underset{(.00211)}{.00927}\,D1_t \end{aligned}$$

LnQ_t = Exchange Quantity
LnP_t = Real Price of Exchange Service
LnY_t = Real New York State Personal Income

T^2, T^3, T^4 = Time Variables with Q1/61 = 100, Incrementing by 1.0 Each Successive Quarter

$D1_t$ = Variable consisting of all zeros except for a value of 1.0 in Q3/71, Q4/71, & Q1/72 to account for the long plant strike

SUMMARY TEST STATISTICS:

$\bar{R}^2$ = .9976

F(7,75) = 4880.6

Durbin's h = .4348

S.E.E. = .00358

Table 3

ESTIMATED PERCENTAGE OF HOUSEHOLDS WITH BASIC TELEPHONE SERVICE[1]

DEMOGRAPHIC CHARACTERISTICS[3]	PRICE INCREASE[2]			
	BASE	50%	100%	200%
ALL	91.52	88.15	83.69	- 7.1% 70.92
YOUNG	85.39	80.12	73.54	-16.9% 56.92
BLACK	86.37	81.38	75.08	-11.3 58.89
RURAL	88.84	84.59	79.10	64.28
MODERATELY POOR	83.81	78.12	71.11	53.93
YOUNG	72.18	64.14	55.22	36.97
BLACK	75.25	67.71	59.12	40.74
RURAL	79.26	72.48	64.50	46.34
VERY POOR	79.28	72.52	64.53	46.38
YOUNG	64.99	56.14	46.88	29.56
BLACK	69.21	60.78	51.66	33.69
RURAL	73.85	66.07	57.31	38.96

1979 & 1980 data

SOURCE: HOUSEHOLD DEMOGRAPHIC AND ECONOMIC DATA: U.S. DEPARTMENT OF COMMERCE, BUREAU OF THE CENSUS, MONEY INCOME OF HOUSEHOLDS IN THE UNITED STATES: 1979 (WASHINGTON, D.C.: U.S. GOVERNMENT PRINTING OFFICE). U.S. DEPARTMENT OF COMMERCE, BUREAU OF THE CENSUS, HOUSEHOLD AND FAMILY CHARACTERISTICS: MARCH 1980 (WASHINGTON, D.C.: U.S. GOVERNMENT PRINTING OFFICE).

TELEPHONE RATE INFORMATION: AMERICAN TELEPHONE AND TELEGRAPH COMPANY, MARKET AND SERVICE PLANS DEPARTMENT, RESEARCH SECTION, MARKET RESEARCH INFORMATION SYSTEMS (MRIS).

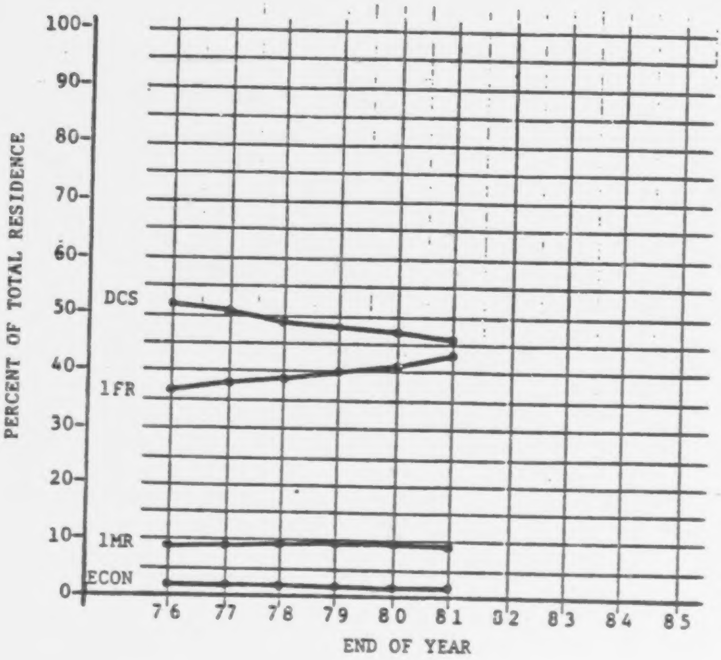
DEFENDANT'S
EXHIBIT
D-4-1518

Table 4

DISTRICT OF COLUMBIA

PERCENT DISTRIBUTION BY GRADE OF SERVICE AT END OF YEAR

RESIDENCE



END-OF-YEAR LINE VOLUMES AND RATES

	1FR		1MR		ECONOMY		DC SVC		TOTAL LINES
	LINES	RATE	LINES	RATE	LINES	RATE	LINES	RATE	
1976	101,016	$9.99	24,653	$5.99	4,659	$3.99	141,698	$5.99	272,026
1977	104,229	$9.99	25,542	$5.99	4,804	$3.99	137,251	$5.99	271,826
1978	106,267	$9.99	26,235	$5.99	4,653	$3.99	135,571	$5.99	272,726
1979	110,625	$9.99	26,850	$5.65	4,538	$3.65	134,246	$5.65	276,259
1980	114,725	$9.99	27,629	$5.65	4,092	$3.65	131,963	$5.65	278,409
*1981	121,879	$8.18	27,231	$4.18	4,599	$2.18	128,723	$4.18	282,432
ø1982	124,999	$8.83	27,011	$4.51	4,688	$2.20	121,828	$4.51	278,526
1983									
1984									

* Disaggregation and rate reduction became effective 6/26/81.

ø 6/82 Volume

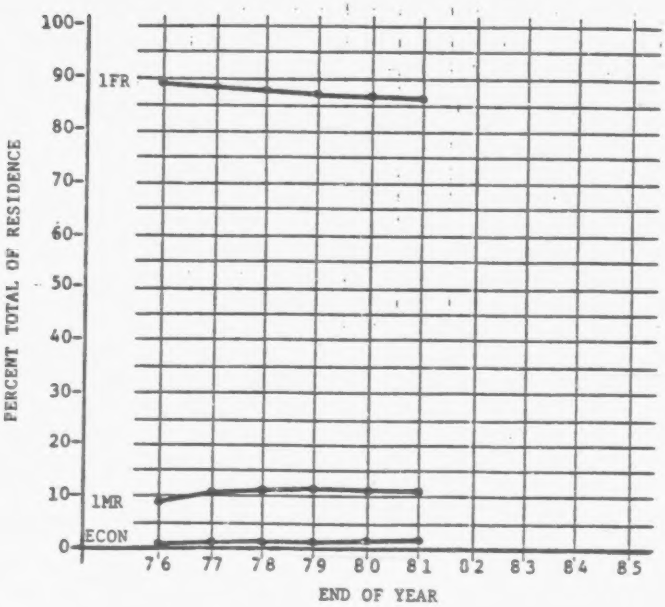
10/19/82

Table 5

MARYLAND

PERCENT DISTRIBUTION BY GRADE OF SERVICE AT END OF YEAR

RESIDENCE



END-OF-YEAR LINE VOLUMES AND RATES

	1FR		1MR		ECON		TOTAL
	LINES	RATE	LINES	RATE	LINES	RATE	LINES
1976	1,141,333	$10.60	119,073	$8.20	13,535	$5.20	1,273,941
1977	1,165,994	$11.35	132,972	$9.00	18,782	$5.90	1,317,748
1978	1,201,505	$11.49	144,262	$9.10	22,925	$5.94	1,368,692
1979	1,240,630	$10.54	154,396	$8.15	25,999	$4.99	1,421,025
*1980	1,274,740	$10.54	156,773	$8.15	29,394	$4.99	1,460,907
1981	1,305,771	$11.05	158,877	$6.50	34,199	$5.20	1,498,847
# 1982	1,306,159	$13.70	156,790	$10.75	37,109	$5.90	1,500,058
1983							
1984							

* Disaggregation became effective 11/22/79.

Note: Rates are from highest Rate Class offering the service indicated.

6/82

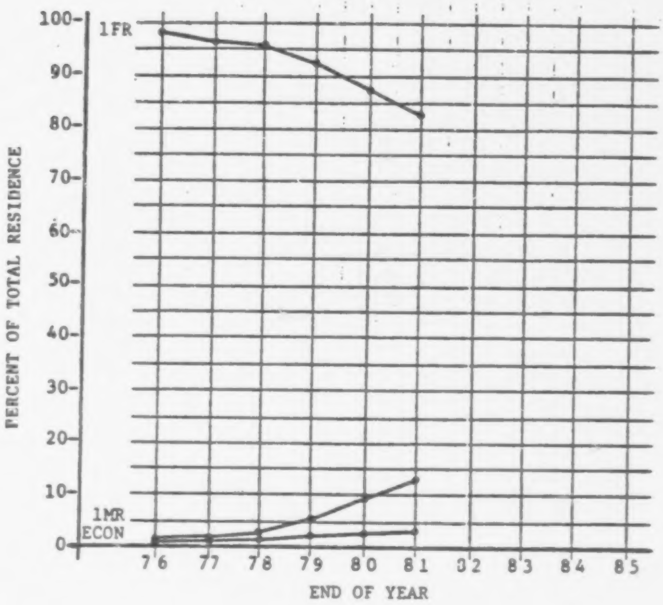
10/19/82

Table 6

WEST VIRGINIA

PERCENT DISTRIBUTION BY GRADE OF SERVICE AT END OF YEAR

RESIDENCE



END OF YEAR LINE VOLUMES AND RATES

	1FR		1MR		ECONOMY		TOTAL
	LINES	RATE	LINES	RATE	LINES	RATE	LINES
1976	338,674	$10.10	3,591	$8.10	3,013	$5160	345,278
1977	356,166	$12.30	6,747	$9.85	4,093	$6.85	367,816
1978	370,046	$13.81	9,885	$9.01	6,074	$6.31	386,006
*1979	371,940	$14.83	20,338	$7.99	8,825	$5.43	401,103
1980	361,723	$16.77	37,588	$8.61	11,607	$5.85	410,918
1981	347,261	$16.77	55,985	$8.61	14,765	$5.85	418,011
ø 1982	345,030	$16.67	61,846	$8.41	16,461	$5.80	423,337
1983							
1984							

* Disaggregation became effective 10/19/79.

Note: Rates are from highest Rate Class offering the service indicated.

ø 6/82 [illegible]. LWS + SHU combined

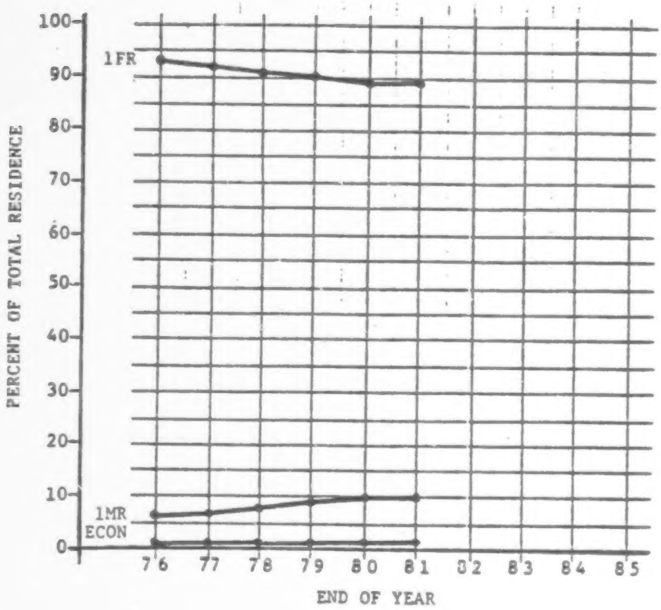
10/19/82

Table 7

VIRGINIA

PERCENT DISTRIBUTION BY GRADE OF SERVICE AT END OF YEAR

RESIDENCE



END-OF-YEAR LINE VOLUMES AND RATES

	1FR		1MR		ECONOMY		TOTAL LINES
	LINES	RATE	LINES	RATE	LINES	RATE	
1976	1,011,779	$ 9.45	64,287	$7.35	1,831	$5.35	1,077,897
1977	1,042,671	$10.80	79,921	$7.95	3,548	$5.90	1,126,140
1978	1,077,384	$10.80	93,214	$7.95	5,590	$5.90	1,176,188
1979	1,105,506	$11.42	111,412	$8.40	6,502	$6.24	1,223,420
*1980	1,127,724	$11.42	125,706	$8.40	7,998	$6.24	1,261,428
1981	1,160,004	$11.79	129,617	$8.25	8,648	$5.87	1,298,269
ø 1982	1,161,945	$11.79	126,398	$8.25	8,689	$5.87	1,297,032
1983							
1984							

* Disaggregation became effective 12/20/80.

Note: Rates are from highest Rate Class offering the service indicated.

ø 6/82 Volumes. 1FR includes 1FR/FLT-MEAS, EXO/FLT-MEAS; 1MR and ECON [illegible]

10/19/82

USE OF THE PERL STUDY IN THE ACCESS CHARGE DISCUSSIONS

The purpose of this paper is to put into proper context the results of the Perl Study--"Economic and Demographic Determinants of Residential Demand For Basic Telephone Service"--as they apply to current access charge discussions. The first section provides background on the study's context, purpose and results. The second section discusses a comparison of two applications of the same equation from the Perl Study: (1) telephone penetration data for hypothetical price increases as presented in U.S. v. AT&T, et. al.; and (2) telephone penetration data for price increases corresponding to alternative access pricing policies under consideration in FCC Docket No. 78-72. The first application, as shown below, entails more extreme price and penetration impacts than the second.

I. BACKGROUND AND OVERVIEW

"Economic and Demographic Determinants of Residential Demand for Basic Telephone Service" is the second of two studies undertaken by Dr. Lewis J. Perl of NERA for FCC Docket No. 20003. This 1978 study, like the earlier (1975) study--"Economic and Demographic Determinants of Telephone Availability"--examines the relationship of the price of residential telephone service and various socioeconomic variables to the proportion of households with telephones. Using data from the 1970 Census and AT&T statistics, a data base was gathered for a cross-sectional sample of 35,000 households. Both the 1975 and 1978 studies employed linear regression analyses of the sample data to relate the likelihood of a household having a telephone to the basic service charge and other economic and demographic variables--

income, age, race, type of household head, etc. In addition, the 1978 study (unlike the earlier study) included installation charges and an indicator variable to distinguish between households with and without measured rate service. The 1978 study also included more sophisticated, logit and probit analyses, which improved the model's statistical properties.

The basic conclusions from these demand analyses are that: (1) although the demand elasticities are small, the probability of a household having basic telephone service is inversely related to both monthly service charges and installation charges; (2) demand elasticity is sensitive to age, income and other measure of socio-economic status (e.g., it decreases with income and age); and, thus (3) raising the price of telephone service will widen the spread in the percentage of households with telephones between high income and low income households.

Although Dr. Perl's study has been characterized as "an important contribution to the empirical analysis of access demand . . . [which] utilizes a rich data base . . . [to derive] interesting and useful [results] "[Taylor, The Demand For Telephone Service: A Survey and Critique of the Literature, 1980, page 76.], it should be noted that there are a number of modifications and refinements to the study which could be made to improve its usefulness as a policy tool. For example, the study is based on 1970 Census data. Thus, for use in forecasting the effect of rate changes in the 1980s, it would be desirable to update the estimates using 1980 census data, which will become available in the next few months. Preliminary work is now underway to implement this and other modifications. Nonetheless, it is possible to obtain some insights about the impact of various access pricing policies by using one of the equations estimated from the 1970 data.

II. COMPARISON OF TELEPHONE ACCESS DEMAND DATA FROM U.S. V. AT&T ET. AL., WITH DATA DERIVED BASED ON PROPOSALS IN FCC DOCKET NO. 78-72

At the November 30, 1982 En Banc meeting for FCC Docket No. 78-72, reference was made to a table derived by Dr. Perl for use in the DOJ case--"Estimated Percentage of Households with Basic Telephone Service" (Exhibit D-4-1518, U.S. v. AT&T et. al., CA No. 74-1698). However, the rate increases evaluated for the DOJ case were hypothetical scenarios designed to reflect the range of possible effects which could occur in individual states. Generally, these scenarios entail price increases that are dramatically different and much larger than the access charges contemplated in Docket 78-72. Consequently, the predicted effects on telephone demand are also larger than the effect of the interstate customer access line alternatives proposed in the docket.

For the DOJ case, rate increases scenarios of 50, 100 and 200 percent were considered to cover possible state-to-state variations in the size of the increases that could have conceivably occurred if some unspecified remedy resulted in an end to local subsidies. These increases were applied an estimated average basic monthly service rate of $10.49 in 1979. The 50, 100, 200 percent increases correspond approximately to $6.60, $13.10 and $26.20 in 1981 dollars. These are clearly larger than the $2 and $7 access alternatives discussed in FCC Docket 78-72. Therefore, the access alternatives would result in impacts which are substantially smaller than those resulting from the hypothetical increases considered in the Perl DOJ exhibit.

This can be seen by comparing the exhibit from the DOJ case (reproduced below, directly from the original, as Table 1) with Table 2 below. Both tables were based on the logistic equation presented in Perl's 1978 Study, which was estimated from 1970 data. (In the following discussion, this equation is called "the 1970 equation.") Table 2 was derived from the 1970 equation by adding the deflated (1970) value of $2.00 and $7.00 CALCs to the basic service rate. (Since the $7.00 CALC is based on the average Bell subscriber line cost for 1981, the deflator used was based on 1970-1981 CPI growth.) From Tables 1 and 2 it can be readily seen that the hypothetical $13.10 and $26.20 (100% and 200%) increases considered in the DOJ case were more extreme increases, with more extreme results, than the $2 and $7 CALCs being discussed in Docket No. 78-72. It should also be noted that the $6.60 (50%) increase from the DOJ exhibit is larger than the CALC which would result if one takes into account the removal of CPE from the rate base, i.e., a reduction from $7 to $5. In addition, a phasing in of a CALC (beginning at $2) and the possible introduction of a high cost support mechanism could further minimize the impact of more cost-based rates on universal service. Also, there would be additional offsets in the event of reduction in interexchange long distance rates.

TABLE 1
Page 1 of 2

ESTIMATED PERCENTAGE OF HOUSEHOLDS WITH BASIC TELEPHONE SERVICE[1]

DEMOGRAPHIC CHARACTERISTICS[3]	PRICE INCREASE[2]			
	BASE	50%	100%	200%
ALL	91.52	88.15	83.69	70.92
YOUNG	85.39	80.12	73.54	56.92
BLACK	86.37	81.38	75.08	58.89
RURAL	88.84	84.59	79.10	64.28
MODERATELY POOR	83.81	78.12	71.11	53.93
YOUNG	72.18	64.14	55.22	36.97
BLACK	75.25	67.71	59.12	40.74
RURAL	79.26	72.48	64.50	46.34
VERY POOR	79.28	72.52	64.53	46.38
YOUNG	64.99	56.14	46.88	29.56
BLACK	69.21	60.78	51.66	33.69
RURAL	73.85	66.07	57.31	38.96

SOURCE: HOUSEHOLD DEMOGRAPHIC AND ECONOMIC DATA: U.S. DEPARTMENT OF COMMERCE, BUREAU OF THE CENSUS, MONEY INCOME OF HOUSEHOLDS IN THE UNITED STATES: 1979 (WASHINGTON, D.C.: U.S. GOVERNMENT PRINTING OFFICE). U.S. DEPARTMENT OF COMMERCE, BUREAU OF THE CENSUS, HOUSEHOLD AND FAMILY CHARACTERISTICS: MARCH 1980 (WASHINGTON, D.C.: U.S. GOVERNMENT PRINTING OFFICE).

TELEPHONE RATE INFORMATION: AMERICAN TELEPHONE AND TELEGRAPH COMPANY, MARKET AND SERVICE PLANS DEPARTMENT, RESEARCH SECTION, MARKET RESEARCH INFORMATION SYSTEMS (MRIS).

DEFENDANT'S
EXHIBIT
D-4-1518

TABLE 1
Page 2 of 2

[1] PERCENTAGES DERIVED FROM THE LOGISTIC EQUATION IN TABLE 3 OF *ECONOMIC AND DEMOGRAPHIC DETERMINANTS OF RESIDENTIAL DEMAND FOR BASIC TELEPHONE SERVICE* USING HOUSEHOLD DEMOGRAPHIC AND ECONOMIC DATA FROM THE FOLLOWING SOURCES: U.S. DEPARTMENT OF COMMERCE, BUREAU OF THE CENSUS, *MONEY INCOME OF HOUSEHOLDS IN THE UNITED STATES: 1979* (WASHINGTON, D.C.: U.S. GOVERNMENT PRINTING OFFICE), AND U.S. DEPARTMENT OF C[illegible]ERCE, BUREAU OF THE CENSUS, *HOUSEHOLD AND FAMILY CHARACTERISTICS: MARCH 1980* (WASHINGTON, D.C.: U.S. GOVERNMENT PRINTING OFFICE).

[2] THE CHARGES USED IN THIS TABLE ARE THE MINIMUM PRICE FOR BASIC SERVICE. THE BASE PRICE, $5.61, ASSUMES NO REAL PRICE INCREASE FROM 1970 THROUGH 1979. THE OTHER CASES REFLECT A 50%, A 100%, AND A 200% INCREASE RESPECTIVELY IN THE BASE PRICE.

[3] 1979 HOUSEHOLD DEMOGRAPHIC AND ECONOMIC DATA (IN 1970 CONSTANT DOLLARS):

VARIABLE	UNIT OF VARIABLE	VARIABLE MEAN
INCOME ADJUSTED MONTHLY SERVICE CHARGE	DOLLARS	5.61
INSTALLATION CHARGE	DOLLARS	7.34
MEASURED RATE SERVICE	INDICATOR	0.35
AGE OF HEAD	YEARS	46.51
INCOME	$100	104.98
AGE × INCOME	$100-YEARS	488.26
PERSONS PER HOUSEHOLD	NUMBER	2.75
EDUCATION	YEARS	11.73
URBAN	INDICATOR	0.86
BLACK	INDICATOR	0.11
SOUTH	INDICATOR	0.32
EMPLOYMENT	INDICATOR	0.69
OTHER MALE HEAD	INDICATOR	0.02
MALE INDIVIDUAL	INDICATOR	0.11
FEMALE INDIVIDUAL *	INDICATOR	0.58 *

IN ORDER TO EVALUATE THE EFFECT OF PRICE ON SUBGROUPS, INDIVIDUAL VARIABLES WERE CHANGED. THE AGE OF HEAD OF HOUSEHOLD WAS SET EQUAL TO 25.00 TO ESTIMATE PERCENTAGES FOR THE SUBGROUP YOUNG. THE VARIABLE AGE × INCOME WAS SET EQUAL TO 215.42 FOR MODERATELY POOR, 103.05 FOR VERY POOR, 262.44 FOR ALL YOUNG HOUSEHOLDS, 115.79 FOR YOUNG MODERATELY POOR, AND 55.39 FOR YOUNG VERY POOR. FOR MODERATELY POOR THE INCOME VARIABLE WAS SET EQUAL TO 46.31 WHICH REPRESENTS THE MEAN HOUSEHOLD INCOME FOR HOUSEHOLDS IN THE LOWER HALF OF THE INCOME DISTRIBUTION. FOR VERY POOR THE INCOME VARIABLE WAS SET EQUAL TO 22.16 WHICH REPRESENTS THE MEAN HOUSEHOLD INCOME FOR HOUSEHOLDS IN THE LOWEST 20 PERCENT OF THE INCOME DISTRIBUTION. FOR BLACK, THE RACE VARIABLE WAS SET EQUAL TO 1.00. FOR RURAL, THE URBAN VARIABLE WAS SET EQUAL TO 0.00.

[*] In replicating the table (page 1), we found that there was a typographical error in this footnote table. The number should have read 0.15. The correct value was used in the regression.

TABLE 2
Page 1 of 3

ESTIMATED PERCENTAGE OF HOUSEHOLDS WITH TELEPHONES, UNDER ACCESS ALTERNATIVES BEING CONSIDERED IN FCC DOCKET NO. 78-72[1]

Demographic[2] Characteristics	Current[3] Rates	Current Rates Plus Interstate CALC of[3]	
		$2.00	$7.00
	(Percent)		
	(1)	(2)	(3)
All	91.52	90.60	87.90
Young	85.39	83.93	79.74
Black	86.37	84.99	81.01
Rural	88.84	87.67	84.28
Moderately Poor	83.81	82.22	77.71
Young	72.18	69.86	63.59
Black	72.25	73.10	67.19
Rural	79.26	77.34	72.01
Very Poor	79.28	77.37	72.04
Young	64.99	62.39	55.56
Black	69.22	66.76	60.21
Rural	73.85	71.61	65.53

---

[1] Percentages derived from the logistic Equation in Table 3 of Economic and Demographic Determinants of Residential Demand for Basic Telephone Service using household demographic and economic data from the following sources: U.S. Department of Commerce, Bureau of the Census, Money Income of Households in the United States: 1979 (Washington, D.C.: U.S. Government Printing Office), and U.S. Department of Commerce, Bureau of the Census, Household and Family Characteristics: March 1980 (Washington, D.C.: U.S. Government Printing Office).

TABLE 2
Page 2 of 3

ESTIMATED PERCENTAGE OF HOUSEHOLDS WITH TELEPHONES, UNDER ACCESS ALTERNATIVES BEING CONSIDERED IN FCC DOCKET NO. 78-72

[2] 1979 Household Demographic and Economic Data (in 1970 constant dollars):

Variable	Unit of Variable	Variable Mean
Income Adjusted Monthly Service Charge	Dollars	5.61
Installation Charge	Dollars	7.34
Measured Rate Service	Indicator	0.35
Age of Head	Years	46.51
Income	$100	104.98
Age x Income	$100-Years	488.26
Persons per Household	Number	2.75
Education	Years	11.73
Urban	Indicator	0.86
Black	Indicator	0.11
South	Indicator	0.32
Employment	Indicator	0.69
Other Male Head	Indicator	0.02
Male Individual	Indicator	0.11
Female Individual	Indicator	0.15

In order to evaluate the effect of price on subgroups, individual variables were changed. The age of head of household was set equal to 25.00 to estimate percentages for the subgroup young. For moderately poor the income variable was set equal to 46.31 which represents the mean household income for households in the lower half of the income distribution. For very poor the income variable was set equal to 22.16 which represents the mean household income for households in the lowest 20 percent of the income distribution. The variable age x income was set equal to 215.42 for moderately poor, 103.05 for very poor, 262.44 for all young households, 115.79 for young moderately poor and 55.39 for young very poor. For Black, the race variable was set equal to 1.00. For rural, the urban variable was set equal to 0.00.

[3] The charges used in this table are the minimum price for basic service. The base price $5.61 (in 1970 dollars) assumes no real price increase from 1970 through 1979. The other cases reflect $2 and $7 CALCs in 1981 dollars, which were deflated to 1970 values of $0.85 and $2.99, respectively.

TABLE 2
Page 3 of 3

ESTIMATED PERCENTAGE OF HOUSEHOLDS WITH TELEPHONES, UNDER ACCESS ALTERNATIVES BEING CONSIDERED IN FCC DOCKET NO. 78-72

Source: Household Demographic and Economic Data: U.S. Department of Commerce, Bureau of The Census, Money Income of Households in the United States: 1979 (Washington, D.C.: U.S. Government Printing Office). U.S. Department of Commerce, Bureau of the Census, Household and Family Characteristics: March 1980 (Washington, D.C.: U.S. Government Printing Office). Telephone Rate Information: American Telephone and Telegraph Company, Market and Service Plans Department, Research Section, Market Research Information Systems (MRIS).

December 22, 1982

Statement of
FCC Commissioner James H. Quello

In Re: Report and Order in CC Docket No. 78-72, Phase 1, In
the Matter of MTS and WATS Market Structure

To state that this was a difficult decision would be to carry the use of understatement to its extreme. The decision was difficult because of its complexity, to be sure, but it was made even more difficult because it is so far-reaching. It's difficult to imagine that any American will be untouched by the action the Commission has taken today.

It would have been easy to resist taking any action at this time, merely postponing action until it was forced upon us. But delay would not serve the public, the telecommunications industry nor would it serve the Commission itself. The die was cast long ago and we are rapidly moving into a new era of telecommunications in this country and throughout the world. Moving toward competition and away from monopoly requires that the industry move toward cost-based pricing. Equal access to the network has been mandated by both this Commission and by the Court in its approval of the Modified Final Judgment. It is also mandated by competition and by technology. We cannot turn back the clock.

This decision was bounded by two very strong considerations. The first is the abiding concern of this Commission and the Congress that the concept of universal service not be sacrificed. In my mind, this is the overriding concern as we attempt to fashion a new rate structure. It bears very heavily upon our second constraint; i.e., the threat that the local exchange will be bypassed by large users. Bypass, while not widely understood and appreciated, provides perhaps a greater threat to universal service than do increased local rates of a magnitude far above those implied by our action today. For example, AT&T has claimed that 5 percent of its customers generate 63 percent of its revenues. By ignoring the threat of bypass, we could only encourage more and more of those large users to leave the local exchanges across the country leaving those exchanges with most of their present costs but without present revenues. Bypass is a phenomenon which feeds upon itself. As more large users leave the exchange, those which remain must bear a larger share of the costs, encouraging more bypass and even higher costs. Clearly, we do not want to encourage such a scenario.

The Report and Order, in my view, is a measured, carefully considered step along a path which will lead to an even better telecommunications service in the future without destroying what we must rely upon in the present. Is it a perfect approach to this very complex problem?

In the words of Voltaire:

> Perfection is attained by slow degrees;
> it requires the hand of time.

SEPARATE STATEMENT
OF
COMMISSIONER JOSEPH R. FOGARTY

In Re: MTS and WATS Market Structure, CC Docket No. 78-72, Phase I

The adoption by the Federal Communications Commission of this Access Charge Order is of historic importance. This decision marks the culmination of a long and tortuous inquiry into a proper access charge structure.[1] Because this Order prescribes the manner of compensation that all exchange carriers will receive for the origination and termination of all interstate and international telecommunications or enhanced service, every ratepayer in this country will be affected. In the first year alone, the access charge plan will require the restructuring of rates for 11 to 13 billion dollars in non-traffic sensitive (NTS) and traffic sensitive (TS) plant.

Given the magnitude of our decision, I believe that I am correct in asserting that the MTS and WATS Market Structure rulemaking is one of the most important proceedings which has come before the Commission during my tenure, if not during the entire history of the Commission. The issues before the Commission in Phase I were not only technically complex, but also raised several important and competing policy considerations. In adopting this access charge plan, the Commission has succeeded admirably in balancing these competing values. The Commission has resisted the Siren-song lure of theoretical purity, recognizing the reality of the need for reasonable rates and maintenance of universal service. In the process, we have developed a plan which advances the overall public interest and is the best solution that could be fashioned under the circumstances. I wholeheartedly support this decision.

---

[1] See MTS and WATS Market Structure, CC Docket No. 78-72, Notice of Inquiry and Proposed Rulemaking, 67 FCC 2d 757 (1978); Supplemental Notice of Inquiry and Proposed Rulemaking, 73 FCC 2d 222 (1979), Second Supplemental Notice of Inquiry and Proposed Rulemaking, 77 FCC 2d 224 (1980); Report and Third Supplemental Notice of Inquiry and Proposed Rulemaking, 81 FCC 2d 177 (1980); and Fourth Supplemental Notice of Inquiry and Proposed Rulemaking, 90 FCC 2d 135 (1982).

Section 1 of the Communications Act mandates that this Commission regulate "so as to make available, so far as possible, to all the people of the United States a rapid, efficient. . . communications service with adequate facilities at reasonable charges." In my judgment, the most critical factor in this proceeding has been the need to structure an access charge plan which would protect this principle and value of universal service. While local exchange service is not so elastic as toll service, it certainly is not inelastic.[2/] In the monopoly environment of the past, the FCC and the State commissions made deliberate compromises in favor of the immediate, pragmatic objective of universal service at the expense of more theoretical objectives, such as economic efficiency. The dilemma created by technological progress and competition is that such compromises have become increasingly difficult to forge, implement, and maintain. No longer are regulators free to increase the load of NTS costs on long distance users in order to keep local residential rates low. Technological advance now affords major toll users the option of bypassing the public network altogether to avoid uneconomic charges. This phenomenon of bypass, with its negative revenue consequences, must still be weighed, however, against the harm that the direct assignment of all NTS costs to end users might cause. Even though bypass would be discouraged, such a strategy of total direct assignment could result in an unacceptable loss in the subscriber base as rural users, the poor and the elderly would be put to a hard choice between essentials.

The access charge structure adopted by the Commission meets this concern by striking an appropriate balance between the need to encourage efficiency and the need to preserve universal service. Under this structure, uneconomic bypass should be discouraged while at the same time there should be no substantial service dislocations. Universal service in rural, high cost areas will be protected by the universal service factor element of the carrier common line charge.

2/ See generally, Appendix G.

Similarly, service discontinuance by those too poor to absorb large rate increases will be discouraged by the implementation of a reasonable maximum end user charge based upon the anticipated Joint Board recommendation in Docket 80-286.[3/]

In achieving this balance, the access charge plan affords both protection to ratepayers and flexibility to telephone companies. The transition period is structured so that the increase in the end user charge to its maximum cost will be gradual, starting with a $4 per month average revenue requirement. Heavy toll users will be protected by a cap on the amount that they may be charged for NTS costs. Telephone companies will be afforded the flexibility to determine how customer charges will be collected during the transition through a combination of usage and flat charges. As a consequence, those low-cost companies facing significant bypass problems and little threat of subscriber loss may move quickly to their full end user charge, while those companies with less significant bypass problems may move more slowly. In addition, the Exchange Carriers Association will allow companies the option to pool their costs in a manner somewhat reminiscent of current practice. This is crucial because for many small carriers developing and administering access charges would present an impossible burden.

Flexibility is also granted to the States as this decision permits them to recover intrastate NTS costs in any fashion they desire. This is important because the amount of NTS plant in the intrastate jurisdiction dwarfs the amount of interstate NTS plant. Further, the circumstances differ between the States, and it may be impossible to develop uniform Federal rules for the access charge

---

[3/] The alternative of a government-sponsored "phone stamps" program is not viable. Among the many problems with such a plan are the fact that the program would be difficult to target and the fact that it would call for increased government expenditures at a time when such expenditures are not feasible.

treatment of intrastate NTS costs.[4] Leaving this discretion with the States will promote the regulatory flexibility and experimentation which has proved so beneficial in the past.

Of even more importance is the fact that there will be a monitoring system, in place by January 1, 1984, designed to ensure that any unforeseen developments that threaten universal service are discovered in time for corrective action to be taken. This built-in flexibility is critical because of the uncertainties involved. In addition, the requirements of periodic staff reports to the Commission and further Commission action before continuing the plan beyond the fifth year will ensure the fulfilment of our statutory mandate.

In addition to striking a realistic balance between the new imperative of economic efficiency and the continuing mandate of universal service, this decision takes the long overdue step of ending what has been an intolerable discrimination between MTS/WATS and ENFIA. Under the rules we have adopted, the OCCs will finally pay the full cost of interconnection--even during the transition. There will be no more discounts. Further, open-end Private Line and FX will also contribute fully for the first time to the recovery of common costs. This is only fair. For too long MTS and WATS ratepayers have been picking up costs which should have been borne by ENFIA and open-end Private Line and FX users.[5] Although during transition AT&T will pay a premium access charge theoretically based on its superior interconnection, the differential will be smaller than the current ENFIA discount and will end at approximately the same time as the OCCs are afforded equal access under the divestiture decree.[6/]

---

[4] We face a very different situation here on access charges than that which we recently confronted on depreciation policy. See Amendment of Part 31, on reconsideration, ___ FCC 2d ___ (1982).

[5] See Dissenting Statement of Commissioner Joseph R. Fogarty, Extension of ENFIA Agreement, 90 FCC 2d 6, 20-21 (1982).

In conclusion, I believe that the Commission has succeeded in developing the best possible access charge plan--a plan which carefully balances competing policy values and recognizes a continuing need for surveillance and possible adjustment in the public interest.

[6/] *See* Modified Final Judgment, *United States v. Western Electric Co.*, Civil Action No. 82-0192 (D.D.C., entered August 24, 1982).

SEPARATE STATEMENT OF COMMISSIONER STEPHEN A. SHARP

In the past, local telephone companies have been compensated in different ways when their plant has been used for the origination or termination of interstate or foreign communications. In general, local telephone companies receive the highest compensation when their plant is used in the provision of interstate MTS/WATS. The lowest rate of compensation is the so-called B-1 rate, which is the monthly rate, usually flat, that local telephone companies charge business customers for local exchange telephone service. Vast interstate private line networks have been created by connecting private lines to B-1 service in each area where the customer wishes to communicate; in some cases these networks rival the public switched telephone network in their coverage. Yet these networks pay only the B-1 rate for "access"; 1/ in part because the B-1 rate is in most instances considerably cheaper than the rate for access that is bundled into the cost of a MTS/WATS call, 2/ the same telephone call often costs the customer less on a private line network than it does under MTS/WATS.

With the rise of competition, the other common carriers (OCCs) sought to utilize B-1 service for access. The established telephone industry naturally opposed this and sought to obtain compensation at the higher MTS/WATS rate. The result of this dispute was a compromise: the OCCs were charged the ENFIA rate for access, 3/ which was higher than the B-1 rate but lower than that received by local telephone companies under MTS/WATS. 4/

1/ The term "access" is used henceforth to denote the use of a local telephone company's plant for the origination and termination of interstate and foreign communication.

2/ AT&T has estimated that the rate for access in an MTS/WATS call is approximately 7¢ per minute in each local exchange.

3/ As the Commission has recognized, ENFIA service is local exchange (i.e., B-1) service at a rate different from that on file with local jurisdictions for that service. See AT&T, 89 FCC 2d 1000, 1001 n. 4 (1982).

4/ See ENFIA, 71 FCC 2d 440 (1979).

The Commission seeks to resolve these rate disparities with a single federal access charge. While this is a laudable goal, I wish to point out that there are many services tariffed with the various states which can be and are being used for purposes of access. Some examples of these services are intrastate WATS and intrastate private line service. It is not always obvious or simple to determine whether these services, tariffed with the states, are in fact being used for interstate and foreign communications. And to the extent that these services are priced lower than the federal access charge, users will attempt to substitute the former for the latter. 5/

If all rates including those tariffed with the states, were based upon the cost of providing the respective service, it would not be necessary to establish a federal access charge since users would be free to use any service, whether tariffed with this Commission or the states, for interstate or intrastate communications as they saw fit. Carriers would remain financially whole regardless of differences in the way the same service is used. There would be no incentives on the part of customers to substitute one service for another because of non-cost based rate disparities, and no need for either the Commission or the telephone companies to police the use to which various services were put in order to make the federal access charge workable. 6/

5/ In page 20 of Appendix F of the order, for example, the Commission notes that in its 1981 Annual Report, Aeronautical Radio, Inc., a large user of communications services, stated that it had replaced federally tariffed private lines in its private line intercity network with cheaper private lines obtained under state tariffs.

6/ If users were free to substitute other, cheaper services for the federal access charge, they would have no incentive to obtain service under federal access tariffs. Under these circumstances, either the Commission or the telephone companies would have to police how substitutable services were being used in order to prevent avoidance of the federal access charge.

We know that local exchange service can be employed practically to interconnect any two points within that local calling area, including points at which access to interstate and intrastate toll can be obtained. In the long run, it appears neither reasonable nor practical to maintain differences in rates for the same service depending on the use to which local exchange service is put i.e., for interstate and foreign communication, intrastate toll communication, or local exchange communication.

It is true that different jurisdictions, in seeking to implement their own policies, may see fit to use different ratemaking approaches which can result in different charges for similar or identical products. From a practical point of view, however, as distinctions between jurisdictionally interstate and jurisdictionally intrastate communications become increasingly blurred and resale becomes more widespread, the desirability of cost-based local exchange rates for each local area will become increasingly apparent. In this way, users of telephone service will pay the same rates regardless of how they use their local service, thereby discouraging uneconomic bypass and eliminating opportunities for arbitrage based upon differing rates for the same service or services.

I hope that the Commission will keep this long term solution in mind when it revisits and reviews the progress in implementing access charges.

n/e/r/a
NATIONAL ECONOMIC RESEARCH ASSOCIATES, INC.
CONSULTING ECONOMISTS

Appendix G--

RESIDENTIAL DEMAND FOR TELEPHONE SERVICE

1983

Prepared for

**The Central Services Organization, Inc.
of the Bell Operating Companies**

by

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December 16, 1983

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1.0 INTRODUCTION

There is widespread concern in Congress and in state regulatory commissions about anticipated increases in charges for access to the telephone network. It has been estimated that monthly charges for basic telephone service, which currently average about $10, will rise to $20-$30 if set to cover the full cost of providing access. Such increases, it is feared, would make telephone service unaffordable to many low income consumers and substantially reduce telephone subscription among such households.

Of course, an increase in price is likely to decrease demand for any commodity and telephone service is no exception. But access to telephone service has widely come to be viewed as one of the necessities or at least near necessities of life. Consequently, the debate over telephone pricing may well focus on the question of how many consumers and which consumers would leave the network in response to price increases.

The purpose of this study is to answer these questions. Using 1980 data for a large sample of households, I have estimated an equation relating each household's probability of subscribing to telephone service to price and other economic and demographic variables. This equation was used to project the effect of price changes on the percentage of households subscribing to telephone service for all U.S. households and for households with varying economic and demographic characteristics.

This study is an update of an analysis which I originally did for AT&T in 1975 and revised in 1978. The 1978 study was used in FCC Docket 20003 to forecast the effect of price changes on residential telephone demand and was also the basis of testimony which I presented on this subject in the Department of Justice (DOJ) antitrust case against AT&T. Since then, others have used (and in some cases misused) the study to forecast the effect of price increases for specific states and socioeconomic groups.

But the 1978 study is based on 1970 data. Since 13 years have elapsed since these data were collected, there is basis for legitimate skepticism about this model's accuracy in forecasting the effect of price changes occurring in the 1980s. In addition, the structure of telephone prices has changed over this period (there are more measured rate service offerings, for example) and this may also have influenced consumer price response. As a consequence, the Bell Operating Companies commissioned me to re-estimate the demand for telephone service using data available from the 1980 Census. This report describes the new analysis.

The results of the new study can be summarized briefly.

- First, the 1983 model suggests significantly lower price effects than the 1978 model. The average elasticity of the 1983 model is about 60 percent of that estimated in 1978. This decline occurs because there has been a marked increase in demand for telephone service between 1970 and 1980.

- Second, access demand is primarily a function of minimum rather than average access charges. Thus, the provision of measured rate service with low access charges or of low priced two-party service can be expected to maintain relatively high levels of access demand even in the face of substantial increases in the price of one-party, flat rate service.

- But, third, demand also depends upon local calling prices. And even at very low access prices, some households will not subscribe to telephone service unless they can make a large number of calls at low prices. This result suggests that decreases in telephone penetration do not necessarily reflect decreases in the affordability of access to telephone service.

- Fourth, as was the case in the earlier study, most of the drop-off which occurs when telephone prices rise is concentrated among low income households. Nearly 60 percent of those who leave the network when prices rise are in the bottom 30 percent of the income distribution. But the provision of "life line" service to low income households may be an effective way to assure high telephone penetration and still charge most subscribers cost-based prices.

- Fifth, the market for telephone service is characterized by an externality. The value of telephone service to each subscriber increases as the number of subscribers on the network increase. This suggests that the price of telephone access should be set somewhat below the cost of access to promote the optimal-sized network. But the welfare gains from subsidizing access are quite small and might not justify the efficiency losses resulting from any practical subsidy program.

The remainder of this report describes the development of the new access demand model and explores the results of this model in more detail. The balance of the report is divided into six sections. Section 2.0 contains a relatively brief summary of the methodology used to develop the new model. This section explains those aspects of the methodology which are necessary to understanding the results and describes key differences between the approach used now and that used in 1978. Section 3.0 describes the principal results of the new model and compares these with the results of the 1978 study. Section 4.0 contains a more detailed description of the current model. In this section, we discuss the functional form chosen for the access demand model, define each of the variables included in the model and explain how the data base used to estimate the model was developed. Section 4.0 also contains a discussion of some of the limitations of the current model and suggests some direction for future research designed to overcome these limitations. In Section 5.0, we describe several alternative demand models which were developed in the course of this study. Finally, Section 6.0 contains some suggestions for further research on demand for telephone service, and Section 7.0 provides a broad summary of the conclusions to be drawn from this study.

2.0 METHODOLOGY IN BRIEF

The 1983 access demand model was developed by examining demand for telephone service for a large sample of households. Data were obtained from the 1980 Census for 80,428 households (a 1/1000 sample of all occupied U.S. households). These data indicate whether or not the household subscribed to telephone service, describe its socioeconomic characteristics (household income, age, education, employment status of the householder, etc.), and assign each household to one of 1,154 geographic areas. These geographic areas are either cities, counties or county groups selected so that each area contains at least 100,000 households. Using exchange-specific rate data provided by the Bell Operating Companies, we estimated the price at which telephone service was available for 71,979 of these households. (Households in areas not served by Bell were omitted.) Statistical analysis was then used to estimate an equation relating the probability of a household subscribing to telephone service to price and to the household's socioeconomic characteristics.

The parameters of the 1983 demand equation are summarized in Figure 1. These parameters describe the effect of each of the variables in the model on demand for telephone service. Figure 1 also contains the mean values of each of the variables used in the model for the sample on which these estimates are based. For purpose of exposition, the determinants of demand have been organized into three groupings--prices, economic and demographic characteristics and local calling area characteristics.

Four components of telephone price are examined in this model: the monthly service charge for one-party flat rate service; the monthly service charge and calling price for one-party measured rate service; and the installation charge. The model is structured to accommodate three types of rate areas: those with only flat rate service; those with both flat and measured rate

Figure 1

1983 NERA TELEPHONE ACCESS DEMAND EQUATION: PARAMETERS AND MEAN VALUES OF VARIABLES

	Units (1)	1980 Mean Values[1] (2)	Coefficient[2] (3)	t-Statistic[3] (4)
Intercept			-1.8125	9.54
Price Variables				
Flat Rate Price (Flat Rate Area Only)	Dollars	9.051	-0.0492	4.46
Flat Rate Price (Measured Rate Area)	Dollars	9.679	-0.0175	2.50
Measured Rate Access Price	Dollars	5.695	-0.0414	2.13
Measured Rate Calling Price	Dollars	0.096	-1.7179	1.92
Installation Price	Dollars	28.304	-0.0034	1.25
Proportion With Measured Rate Service	Decimal	0.543	0.1526	0.82
Household Characteristics				
Household Income	$1,000	20.026	0.1296	20.83
Household Income Squared	$1,000,000	621.158	-0.0011	13.67
Age of Householder	Years	47.156	0.0446	26.31
Income* Age	$1,000-Years	917.958	-0.0003	2.55
Education of Householder	Years	12.125	0.1489	26.52
Race of Householder	Indicator[4]	0.102	-0.5133	11.24
Employment Status	Indicator[5]	0.697	0.3874	9.29
Persons in Household	Number	2.764	-0.0503	3.26
Proportion Less Than 6	Decimal	0.070	-0.7417	6.29
Proportion 6-12	Decimal	0.061	0.4242	2.86
Proportion 65+	Decimal	0.042	1.3412	6.61
Language Other Than English Spoken	Indicator	0.103	-0.3920	7.09
English Spoken Poorly Or Not At All	Indicator	0.018	-0.1477	1.50
Family Household, No Wife Present	Indicator	0.025	-0.8722	10.18
Family Household, No Husband Present	Indicator	0.102	0.1162	2.06
Nonfamily Household, Male Householder	Indicator	0.107	-1.2436	22.36
Nonfamily Household, Female Householder	Indicator	0.152	0.1453	2.20
Nonfarm	Indicator	0.827	0.1096	2.51
South	Indicator	0.328	-0.3588	8.20
Local Calling Area Characteristics				
Phone Density 1 (1-100)	Indicator[6]	0.336	-0.2047	3.43
Phone Density 4 (1,001-2,500)	Indicator[6]	0.120	0.2516	3.40
Phone Density 5 (2,501-5,000)	Indicator[6]	0.083	-0.2189	2.61
Phone Density 6 (5,001+)	Indicator[6]	0.034	-0.3344	3.67
Number of Subscribers in Local Calling Area (in Natural Logs)	ln-1,000	4.693	0.0990	4.91
Number of Observations			71,979	
R^2			0.099	

[1] The mean values are the means for the sample used to estimate this equation, i.e., for the 71,979 households for which rate data were available.

[2] Coefficients measure the change in the natural log of the odds of a household having a telephone for a 1 unit change in the variable.

[3] The t-statistic is the ratio of the coefficient to its standard error. Since parameter estimates are normally distributed, these t-statistics can be used to test hypotheses about the true value of each coefficient.

[4] Race = 1 if the householder is black, and 0 otherwise.

[5] Employment = 0 if the householder is unemployed or not in the labor force and 1 otherwise.

[6] The ranges for the phone density indicators are in numbers of mains per square mile. The range 101-1000 phones per square mile is the reference group.

service available to all subscribers; and those offering only flat rate service to some subscribers and both flat and measured rate service to others. The model's structure allows the effect of the flat rate service price to be different in areas where it is the only rate option and in areas where measured rate service is offered.

The household characteristics examined in the model include: household income; the age, education, employment status and race of the household head; the number of persons in the household and their distribution by age. We distinguish among five household types--husband/wife households; family households headed by a male with no wife present; family households headed by a female with no husband present; male-headed nonfamily households and female-headed nonfamily households. We also distinguish households in which a language other than English is spoken and in which English is not spoken well. And, we distinguish between farm and nonfarm households.

Finally, the probability of a household subscribing to telephone service is related to the number of main lines and the number of main lines per square mile in each household's local calling area. These variables are included to measure a potential externality in the demand for telephone service--the likelihood of any one household subscribing depends upon the number of other households which subscribe.

The equation described in Figure 1 is a logistic equation. That is, it forecasts the natural log of the odds of a household subscribing to telephone service as a function of household characteristics and price. (For readers who do not gamble, the odds of an event occurring equal the probability that it will occur divided by the probability that it will not. Thus, if the probability of a household having a phone is 0.95, the odds that it has a phone are 0.95/0.05 or 19 to 1.)

The equation in Figure 1 can be used to forecast the probability of subscription to telephone service for any household. To do so, each of the household's characteristics (income, education, age, number of persons, etc.), the characteristics of the calling area in which the household lives (number of subscribers and density of subscribers in the local calling area), and each applicable telephone rate is multiplied by the appropriate parameter relating that characteristic to demand. The sum of these products equals the log of the odds of telephone subscription for the household, from which the probability of telephone subscription can be derived. By calculating probabilities of telephone subscription for a representative sample of households, the model can also be used to forecast the percentage of households with phones for an area or for a specific socioeconomic group. And, by making these estimates at various price levels, one can determine the effect of alternative pricing policies on the percentage of households with phones.

The 1983 model differs from our earlier study in five key ways. First, the 1983 model is based on 1980 Census data; the 1978 model is based on 1970 data. Second, prices used in the 1983 model were measured more precisely than those used in 1978. Currently, the prices are based on data for 7,260 exchanges; in 1978 we used data for 100 Revenue Accounting Offices (RAO's). Third, the 1983 model includes prices for both flat and measured rate service; the 1978 model included only a single minimum access price. Fourth, the 1983 model relates access demand to the size of the local calling area; the 1978 model did not explore this relationship. Fifth, the 1983 model includes some household characteristics not examined earlier. For comparative purposes, the parameters of the 1978 model are described in Figure 2.

Figure 2

1978 NERA TELEPHONE DEMAND EQUATION: PARAMETERS AND MEAN VALUES OF VARIABLES

	Units (1)	1970 Mean Values[1] (2)	Coefficient[2] (3)	t-Statistic[3] (4)
Intercept			-0.9101	4.11
Price Variables				
Flat Rate Price (Flat Rate Area Only)	Dollars			
Flat Rate Price (Measured Rate Area)	Dollars	11.907[4]	-0.0624	5.37
Measured Rate Access Price	Dollars			
Measured Rate Calling Price	Dollars	-	-	-
Installation Price	Dollars	15.566	-0.0105	2.21
Proportion With Measured Rate Service	Decimal	0.348	-0.2425	5.25
Household Characteristics				
Household Income	$1,000	18.781	0.0778	12.31
Household Income Squared	$1,000,000	582.997	-	-
Age of Householder	Years	48.203	0.0350	19.14
Income* Age	$1,000-Years	872.925	-0.0003	2.36
Education of Householder	Years	11.960	0.1164	22.10
Race of Householder	Indicator[5]	0.097	-0.5953	13.23
Employment Status	Indicator[6]	0.736	0.2337	5.07
Persons in Household	Number	3.110	-0.0486	4.12
Proportion Less Than 6	Decimal	NA	-	-
Proportion 6-12	Decimal	NA	-	-
Proportion 65+	Decimal	NA	-	-
Language Other Than English Spoken	Indicator	NA	-	-
English Spoken Poorly Or Not At All	Indicator	NA	-	-
Family Household, No Wife Present	Indicator	0.025	-0.6235	6.32
Family Household, No Husband Present	Indicator	0.088	-	-
Nonfamily Household, Male Householder	Indicator	0.073	-1.2900	22.09
Nonfamily Household, Female Householder	Indicator	0.124	-0.1900	3.10
Nonfarm Area	Indicator	0.805	0.3551	7.64
South	Indicator	0.303	-0.3480	7.62
Local Calling Area Characteristics				
Phone Density 1 (1-100)	Indicator[7]	NA	-	-
Phone Density 4 (1,001-2,500)	Indicator[7]	NA	-	-
Phone Density 5 (2,501-5,000)	Indicator[7]	NA	-	-
Phone Density 6 (5,001+)	Indicator[7]	NA	-	-
Number of Subscribers in Local Calling Area (in Natural Logs)	ln-1,000	NA	-	-
Number of Observations		63,444	36,703	
R^2			0.146	

NA - Not available.

[1] The mean demographic values are the means for the entire sample, including households for which rate data were not available, whereas the model was estimated using only those households for which rate data were available. Price and income values are expressed in 1980 dollars.

[2] Coefficients measure the change in the natural log of the odds of a household having a telephone for a 1 unit change in the variable. The coefficients of price and income variables have been adjusted for inflation to make them comparable with the new model.

[3] The t-statistic is the ratio of the coefficient to its standard error. Since parameter estimates are normally distributed these t-statistics can be used to test hypotheses about the true value of each coefficient.

[4] In the 1978 model, the access price was an estimate of the lowest available rate prevailing in each of the areas sampled. Where measured rate service was available, these estimates were based on rate data which included some people subscribing to measured rate service.

[5] Race = 1 if the householder is black, and 0 otherwise.

[6] Employment = 0 if the householder is unemployed or not in the labor force and 1 otherwise.

[7] The ranges for the phone density indicators are in numbers of mains per square mile. The range 101-1000 phones per square mile is the reference group.

Both in 1983 and in 1978 maximum likelihood estimation was used to derive the parameters of the demand equation. As with any statistical technique, the maximum likelihood approach cannot measure the "true" parameters of the demand model with certainty. Each of the estimates is associated with a margin of error or confidence band. In order to describe the width of these confidence bands, Figure 1 provides a "t-statistic" for each coefficient. These "t-statistics" are the ratio of value of each coefficient to its "standard error." (If the t-statistic is 2.0, the coefficient is twice its standard error.) Given the large size of the sample, the distribution of possible values for each coefficient is approximately normal. Consequently, a 95 percent confidence interval for each coefficient can be established by adding and subtracting 1.96 standard errors to each coefficient.

The reader will undoubtedly note that the R^2 statistics are quite low for both the current and the 1978 models. However, this statistic is a misleading measure of the model's reliability. The R^2 statistic measures the percent of the variance in individual decisions to subscribe which is accounted for by the model. But, this model only predicts the probability of subscription and obviously cannot be expected to forecast individual decisions with precision. In fact, for groups of 25 households or more the model provides quite reliable predictions of the percentage of households subscribing to telephone service. For a fuller discussion see Section 3.6 below, and pages 35-36 of my 1978 study (Economic and Demographic Determinants of Residential Demand for Basic Telephone Service, March 28, 1978).

3.0 RESULTS

In this section, we describe the principle empirical results of the 1983 telephone demand study. In Subsection 3.1, we describe the impact on the percentage of households with phones (hereafter referred to as telephone penetration) of changes in the general level of access prices. In Subsection 3.2 we describe the effect on telephone penetration of changes in particular components of telephone price--flat rate access charges, measured rate access charges, local usage charges and installation charges. In Subsection 3.3, we examine differences in telephone penetration and in the effect of price on telephone penetration by income group. In Subsection 3.4, we explore the extent of the externality in the demand for telephone service and its implication for telephone pricing. In Subsection 3.5, we examine the effects on telephone penetration of various household characteristics other than income and, in Subsection 3.6, we examine the reliability of the 1983 model in forecasting penetration.

In reviewing these results, we urge the reader to keep two caveats in mind. First, the relationships described throughout this report are based on statistical correlations between household characteristics, price and telephone subscription. While such correlations are suggestive, they do not demonstrate causality. Correlations often have more than one plausible interpretation.

Second, in this section the predictions of the demand model are reported in a numerically precise fashion. However, these predictions are all subject to a margin of error and actual effects could be either larger or smaller. This is particularly true where the model is being used to draw inferences about the effect of prices which are outside the range of historic observation.

3.1 Access Prices

The 1983 access demand model forecasts markedly smaller effects for increases in access prices than the 1978 model. This is illustrated in Figure 3 which shows the percentage of households with phones at alternative access price levels, using both the current model and that developed in 1978.

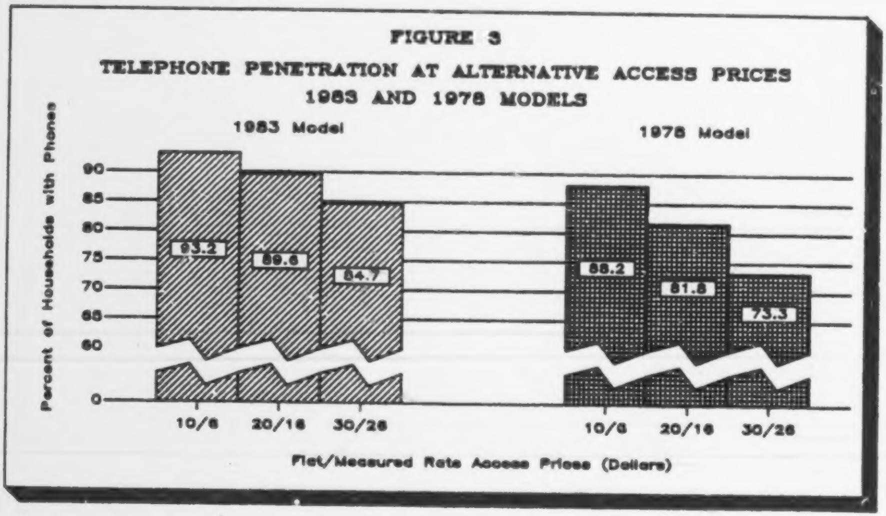
FIGURE 3

TELEPHONE PENETRATION AT ALTERNATIVE ACCESS PRICES
1983 AND 1978 MODELS

If all access prices are increased by $10* (from $10 to $20 per month for flat rates and from $6 to $16 per month for measured rates) the current model forecasts a reduction in average penetration from 93.2 percent to 89.6 percent--a decline of 3.6 percentage points. By contrast, using the 1978 model for the same increase results in a decline in penetration from 88.2 to 81.8 percent or by 6.4 percentage points. Thus, the price effect implied by the

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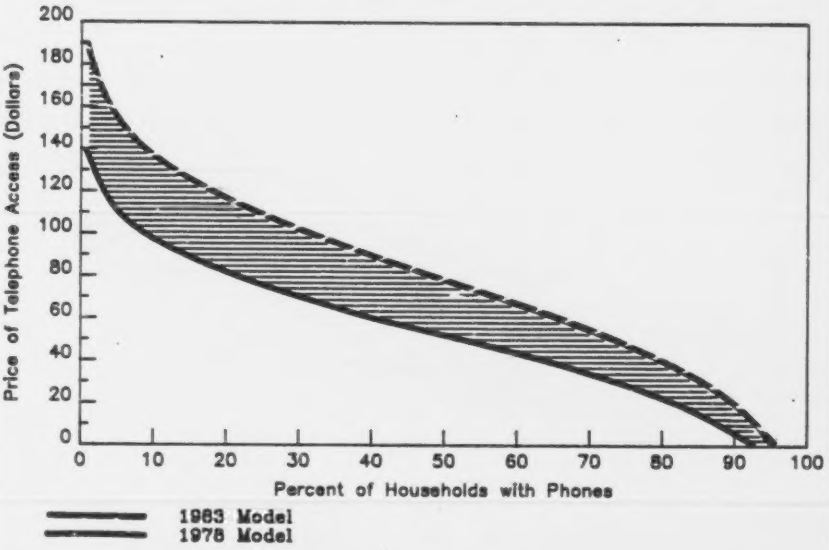
* All prices (and income levels) used in this report are in constant 1980 dollars. The coefficient of income and price from the 1978 model, which as estimated reflected these effects in 1970 dollars, were converted to 1980 dollars using the consumer price index.

1978 model is nearly 80 percent larger than that estimated in 1983. A similar relationship between the old and new models is observed when price is increased by $20.

The decrease in the price effect between the 1978 and the 1983 models occurs because there was a marked increase in the level of telephone demand from 1970 to 1980. This shift in demand is illustrated more fully in Figure 4, which describes the relationship between telephone demand and price in both the current model (which reflects 1980 data) and the 1978 model (which reflects 1970 data). As this figure makes clear, telephone penetration in the current model is higher at every price level. A characteristic of the logit model is that as the penetration level increases, the effect of price on penetration

FIGURE 4

ACCESS PRICE AND DEMAND FOR TELEPHONE SERVICE
1983 AND 1978 MODELS



diminishes. As is clear from Figure 4, at every price level the slope of the 1983 demand model is flatter than that of the 1978 model. Consequently, the increase in demand occurring from 1970 to 1980 accounts for a large part of the decrease in the price effect between the 1978 and 1983 models.

The increase in demand for telephone service occurring over the past decade was not primarily attributable to changes in those economic and demographic variables included in the demand model. From 1970 to 1980 there were decreases in access price, increases in income, and changes in other household characteristics; but, these changes would account for about a 2.0 percentage point increase in telephone demand. However, over this period the percentage of households with phones increased by 7.0 percentage points. Thus, other variables not treated in the model (taste changes, changes in prices of toll services, changes in prices of telephone substitutes, for example) account for a 5.0 percentage point increase.

The marked increase in telephone demand occurring over the decade is of great importance in the current debate over access pricing. Because of this increase, demand is much less sensitive to increases in access prices than would have been the case a decade ago. Thus, the goal of maintaining universal service and the goal of instituting cost-based pricing are not as conflicting as they seemed to be when the 1978 study was done.

Moreover, the same factors which increased telephone demand over the last decade may well continue to increase demand throughout the 1980s. Some possible sources of past increases in demand are increases in prices for other means of communication, reduced long distance toll rates, increases in the number of services available by phone and an increased need for the phone as a source of security. If, as seems likely, these trends continue in the 1980s, they can be expected to offset, in whole or in part, the effect of increased access prices. For this reason, the effects described in Figures 3 and 4 may overstate the effect of increases in access prices occurring during the 1980s.

The change which has occurred between the 1978 and 1983 models can also be understood in another way. Economists often describe the price effects of demand models in terms of "elasticity." Elasticity measures the percentage decrease in demand which occurs for any specified percentage increase in price. For the NERA access demand model, elasticity is not constant but varies with both the base price and the percentage of households with phones. Figure 5 summarizes the estimated demand elasticity, from the 1983 and the 1978 models, for several different prices and penetration rates. At current prices and penetration rates, the 1983 model implies a price elasticity of 0.032. (A 100 percent increase in price results in a 3.2 percent decrease in penetration.) At the same penetration rate and price, the 1978 model implies only a slightly higher elasticity--0.044. But at current prices and income levels, the 1978 model implies a much lower penetration rate--88 percent versus 93 percent for the current model. And at this lower penetration rate, both models have markedly higher elasticities--0.055 for the current model and 0.075 for the 1978 model. Thus, most of the change in price elasticity occurs because penetration rates have risen markedly over the decade.

The differences in price elasticity resulting from variations in price and penetration are also important in a different context. There are wide variations in access prices and telephone penetration from area to area in the U.S. In 1980, average flat rate access prices by state ranged from $5.50 to $16.30 per month and statewide average penetration rates ranged from 84.2 percent to 97.0 percent. As a consequence, price elasticities will also vary from area to area. For example, in a state with a 97 percent penetration rate and a $6 access price, the price elasticity is 0.009; in a state with a $16 access price and an 84.2 percent pentration rate, the price elasticity is 0.12. Clearly, in forecasting price effects in specific areas, it is essential to take price levels and economic and demographic characteristics into account and not to generalize based on national averages. The current access demand model can be used to make such forecasts on a state-by-state basis. For a discussion of the use of the model in making state forecasts, see Subsections 3.6 and 4.6.

Figure 5

PRICE ELASTICITY AT ALTERNATIVE PRICES AND TELEPHONE PENETRATION RATES

Telephone Penetration (1)	Access Price[1] (2)	Price Elasticity	
		1983 Model (3)	1978 Model (4)
88.0%	$ 10/6	-0.0546	-0.0749
	20/16	-0.1199	-0.1498
	30/26	-0.1853	-0.2246
93.0	10/6	-0.0318	-0.0437
	20/16	-0.0700	-0.0874
	30/26	-0.1081	-0.1310
97.0	10/6	-0.0136	-0.0187
	20/16	-0.0300	-0.0374
	30/26	-0.0463	-0.0562

[1] The access prices shown in col. (2) are flat rates/measured rates. The computed elasticities assume the same percentage increase in all access prices. In computing these effects using the 1983 model, 54 percent of the population was assumed to have access to measured rate service. This was the actual availability in 1980.

3.2 Rate Structures

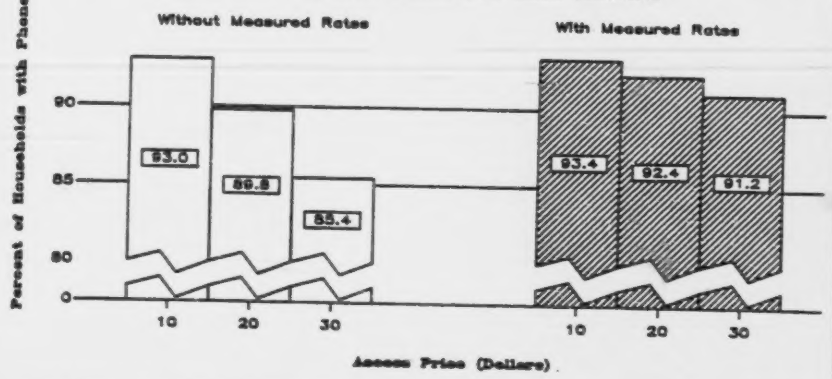
In the analysis described above, we have examined the effect of raising all access prices by the same amount. In this section, we explore the separate effects of varying flat rate prices, measured rate prices and installation charges. The results of this subsection can be summarized briefly:

1. Demand for telephone service is primarily related to the minimum price at which access is available. Thus, increasing flat rate prices or prices for one-party service will have relatively little effect on demand if low cost measured rate service or two-party service are available.
2. But demand also depends on usage prices, and even at very low access prices some households will not subscribe to telephone service unless local usage prices are also low. This result suggests that telephone penetration alone should not be used to measure the affordability of access to the telephone network.
3. When effects are examined per dollar of revenue generated, demand for telephone service is more sensitive to installation charges than to monthly service charges. This result suggests that demand might be increased by allowing customers to pay off installation charges over time.

Almost all telephone subscribers are offered a choice among a number of service options. For somewhat more than half of all Bell subscribers, there is the choice between flat and measured rate service. And in areas without measured rate service there is generally a choice between one- and two-party service. Consequently, it is important to distinguish between the effect on access demand of raising all access prices and the effect of raising the price for one service while holding other prices constant. To make this distinction, we compared the effect of increasing flat rate access charges in areas where there is no measured rate service and in areas where there is a low cost measured rate option. The results are summarized in Figure 6. When flat rate service is the only option, increasing access prices by $20 results in a 7.6 percentage point decline in penetration. But if measured rate service is available (at a $6 access price and a 10 cent charge for local calls), the same increase in the flat rate price decreases demand by only 2.2 percentage points. Clearly, many consumers, who would be driven off the network if all access prices rise, will simply move to a lower cost option if only the flat rate rises.

FIGURE 6

TELEPHONE PENETRATION AT ALTERNATIVE FLAT RATE ACCESS PRICES WITH AND WITHOUT MEASURED RATE SERVICE

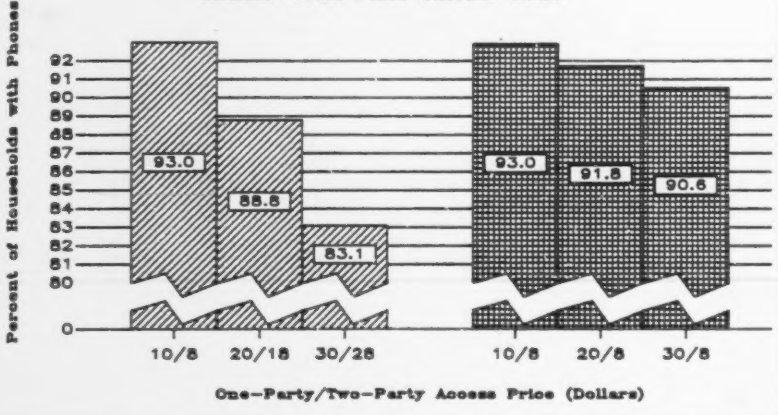


This result suggests that telephone demand depends primarily on the minimum charge for access and that as long as some low cost option exists, penetration will be quite high even if high prices are charged for more enriched grades of service. Some additional evidence suggests that this is also true when the low cost option is multi-party rather than measured rate service. In areas offering only flat rate service, we examined the separate effects of varying the one- and two-party access charges. Although the results, which are summarized in Figure 7, are not highly reliable in a statistical sense, they are certainly suggestive. They appear to indicate that increasing both the one-party and two-party rates by $20 would reduce demand by 9.9 percentage points; raising just the one-party rate reduced penetration by only 2.4 percentage points. Although the weak statistical significance of this result precluded its inclusion in our basic model, it is nevertheless worthy of note. The model on which it is based is discussed more fully in Section 5.0.

FIGURE 7

TELEPHONE PENETRATION AT ALTERNATIVE ONE- AND TWO-PARTY FLAT RATES

AREAS WITH FLAT RATES ONLY



Although demand for telephone service is primarily dependent on a minimum access price, access demand is also sensitive to usage prices. This result is explored in Figure 8, in which we estimate penetration rates under various assumptions about the price of flat and measured rate service. As this table indicates, even at very low measured rate access prices, increasing either the flat rate price or the measured rate calling price will drive some users off the network. For example, if measured rate service is available to all at a $5 access price and a calling price of 5.0 cents, raising the flat rate access price from $10 to $30 reduces demand by 2.0 percentage points. Users who leave the network under these circumstances are those who are interested in telephone

Figure 8

TELEPHONE PENETRATION RATES AT ALTERNATIVE FLAT AND MEASURED RATE PRICES[1]

Measured Rate		Flat Rate Access Price		
Access Price (1)	Calling Price (2)	$10 (3)	$20 (4)	$30 (5)
$ 5	$0.05	93.99%	93.05%	92.01%
	0.10	93.54	92.55	91.45
	0.20	92.57	91.47	90.23
10	0.05	92.87	91.80	90.60
	0.10	92.36	91.23	89.97
	0.20	91.25	89.99	88.60
15	0.05	91.59	90.37	89.02
	0.10	91.01	89.72	88.30
	0.20	89.75	88.33	86.77

[1] Assumes 100 percent measured rate availability.

service only if they can get on the network at low cost and make numerous calls at little or no charge. There is another group of subscribers who are not sensitive to flat rate prices but are sensitive to measured rate usage charges. Thus, at access prices examined in Figure 8, raising the measured rate usage price from 5 cents to 20 cents per call, reduces access demand by 1.4 to 2.3 percentage points.

These results imply that telephone penetration is an ambiguous measure of affordability of access to the telephone network. Figure 8 suggests that when faced with a high calling price, many households will not subscribe to telephone service even at a very low access price. And yet these same households will subscribe at higher access but lower usage prices. For example, there are more subscribers on the network at a measured rate access price of $10 and a usage price of 5 cents than at a measured rate access price of $5 and a usage price of 20 cents. Low penetration rates may result, in some cases, not because subscribers cannot afford access, but because at prevailing usage prices subscription is not sufficiently attractive. If "affordable" access is the goal of public policy, this result suggests that telephone penetration provides an ambiguous measure of the attainment of that goal.

This analysis of access and usage price effects has a number of important implications regarding telephone pricing policy. First, it indicates that the effect of cost-based pricing on access demand will depend significantly on the specific costs of various components of telephone service. Thus, if the cost of one-party access is high, but the cost of two-party access is markedly lower, then high levels of penetration might be maintained by offering consumers two-party service at a low access price. Similarly, if the cost of local usage is relatively high, then measured rate service with no calling allowance can be offered with an access price substantially below that for flat rate service. And our results suggest that a low access price for measured rate service, even at a high calling price, would maintain relatively high penetration rates. Clearly, determining whether or not there is a conflict between cost-based pricing and high rates of penetration depends on carefully estimating the cost of various components of telephone service.

Second, leaving costs aside, the results suggest that high levels of telephone penetration could be maintained with substantially less subsidization of local service charges than exists today. This could be done by increasing monthly charges for one-party flat rate service while maintaining low access charges for two-party service and measured rate service. As long as the bulk of consumers continued to select one-party flat rate service such a strategy would reduce significantly the subsidization of local service without reducing penetration.

Of course, the risks of this approach are obvious. If the pattern of prices described above does not reflect costs and if a substantial fraction of users elect to take the lower-priced, subsidized options, the required subsidies could be very large. Moreover, if local usage prices are set above cost, this will encourage consumers to make fewer calls than would be efficient and to bypass the local network where possible. These risks, however, do not suggest that this policy should not be explored. However, the risks emphasize the importance of obtaining more information before selecting a pricing strategy. In addition to the cost studies alluded to above, it is essential to answer two additional questions:

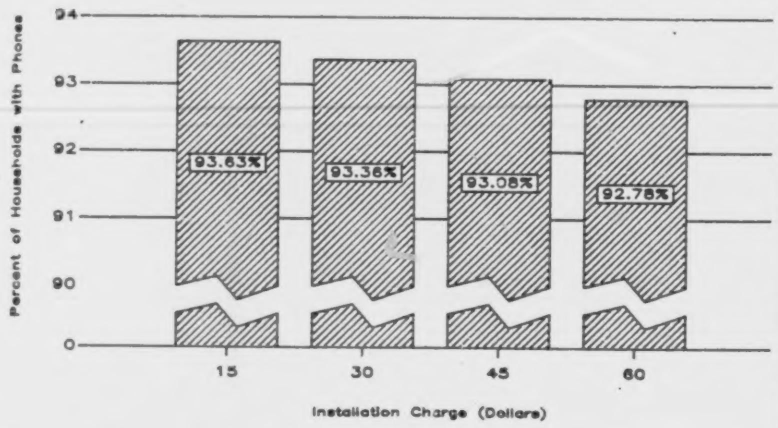
1. What is the effect of price on the percentage of consumers choosing a particular class of service?

2. What is the expected usage level of consumers selecting measured rate options and how is this usage level affected by usage and access prices?

Our study also suggests that policies regarding installation charges can have a significant affect on penetration. Figure 9 describes the effect of increased installation prices on telephone demand. This figure suggests that each $15 increase in installation charges is associated with about a 0.3 percentage point drop in telephone demand. This effect may seem quite small, but it is not. The installation charge is not a recurrent charge and for the average consumer each $1 increase in installation charges is equivalent, in revenues generated, to a rise of only 1.8 cents in the monthly service charge. (The average installation lasts for about seven years. Over such a period, at a discount rate of 12 percent annually, a 1.8 cent increase in the monthly service charge yields revenue with a present value of $1.00.) Viewed per dollar of revenue generated, the effect of installation charges is four times as great as that for monthly service charges.

FIGURE 9

TELEPHONE PENETRATION AT ALTERNATIVE INSTALLATION CHARGES



The substantial effect of installation charges on penetration probably reflects two factors. First, while the average consumer moves infrequently and is therefore relatively insensitive to installation charges, some consumers move more frequently and these consumers may be quite sensitive to installation charges. Second, some consumers, in particular those with low incomes, have quite high discount rates. These consumers also would be more sensitive to installation charges, which must be paid when the household elects to subscribe, than to monthly service charges, which are paid later. To the extent that high discount rates are a factor in the pronounced effect of installation charges, penetration might be increased by allowing consumers to pay off installation charges over a period of time as part of the monthly service charge. Note, however, that the effect of installation charges is not measured with high statistical reliability and the actual effect could be much smaller. Consequently, this policy implication should be viewed as an interesting suggestion and not a determinative result.

3.3 Household Income

In this section, we examine differences in telephone penetration and the effect of price on telephone penetration by income group. The results of this analysis can be summarized briefly.

1. There has been a marked narrowing over the past decade in income-related differences in telephone penetration. Nevertheless, there are still significant differences in telephone penetration by income. For households in poverty, telephone penetration is about 16 percentage points below that of average income households.

2. Increasing the telephone access price will have a more pronounced effect on low than on high income households. As a consequence, increasing the price will tend to increase the spread in penetration between high and low income households.

3. Income-related differences in penetration can be reduced by providing life line rates for low income households. If restricted to low income households, life line rates represent a low cost way of maintaining overall penetration despite marked increases in average access prices.

To explore penetration by income level, 1980 Census data were used to construct seven subsamples of the population classified by household income. In defining these income classes, we used multiples of the Social Security Administration poverty guideline--income below poverty level, 1-2 times poverty, between 2-3 times poverty, etc. The poverty guideline was used because it varies by size of household and age of head and is designed to represent the same minimal living standard for each household. (For a description of the poverty guideline see U.S. Bureau of the Census, Characteristics of the Population Below the Poverty Level-1979, Table A-3, p. 207.) The range of income and the percentage of the population in each subgroup are summarized in Figure 10.

Figure 10

ACTUAL AND PREDICTED TELEPHONE PENETRATION BY INCOME GROUP

Income Group	Mean Income (1)	Percent of Households (2)	Telephone Penetration Actual (3)	Telephone Penetration Predicted (4)
Below Poverty	$ 3,491	11.35%	80.53%	80.22%
1-2 Times Poverty	8,636	19.15	89.00	89.79
2-3 Times Poverty	15,152	19.67	94.15	93.90
3-4 Times Poverty	20,761	16.03	96.60	96.26
4-5 Times Poverty	25,472	12.03	97.85	97.38
5-6 Times Poverty	30,110	7.84	97.91	98.15
Above 6 Times Poverty	44,822	13.93	98.75	98.95
All	20,026	100.00	93.39	93.39

The 1983 telephone demand model was then used to forecast telephone penetration for each of these groups, at prices prevailing in 1980. A comparison of actual and predicted penetration for each group is also described in Figure 10. Actual penetration ranges from 80.5 percent for those in poverty, to 96.6 percent for those with average income (3 to 4 times poverty) and 98.8 percent at the highest income examined. Thus, there is a 16.1 percent spread between those in poverty and those of average income and a 18.2 percentage point spread between the lowest and highest income groups.

Predicted penetration is quite close to actual penetration for each of these groups; the differences are less than one percentage point in each of the groups. This provides some assurance that the model can be used to predict telephone penetration by income and, more importantly, to predict price effects for each income group.

However, before examining the effect of price increases, let us compare the forecasts of telephone penetration as derived from the current demand model with those estimated using the 1978 model. These differences, which can be used to measure the effect of demand changes occurring between 1970 and 1980, are summarized in Figure 11. The 1983 model predicts higher penetration at every level of income, but the disparities are greatest at the low income levels. For those in poverty, telephone penetration increased by 8.8 percentage points. For the average income household, the increase was 5.5 percentage points and for the highest income households 1.4 percentage points. Thus, changes occurring over the decade have narrowed income-related differences in penetration and these same changes may well continue over the coming decade. If this occurs, income-related disparities in penetration and in price effects, as estimated from the current model, will overstate the future disparities.

Figure 11

ESTIMATED TELEPHONE PENETRATION BY INCOME GROUP

1983 and 1978 Models

Income Group	Estimated Telephone Penetration 1983 (1)	1978 (2)
Below Poverty	80.22%	71.45%
1-2 Times Poverty	89.79	81.34
2-3 Times Poverty	93.90	86.89
3-4 Times Poverty	96.26	90.79
4-5 Times Poverty	97.38	93.01
5-6 Times Poverty	98.15	94.74
Above 6 Times Poverty	98.95	97.59
All	93.39	87.54

Because telephone penetration is lower for low income households, such households are also more sensitive to price increases. This is illustrated in Figure 12, in which we summarize forecasted telephone penetration rates for each of these groups at current prices, with a $10 increase in all prices and with a $20 increase. For the average income household (those with incomes 3-4 times the poverty level) a $10 increase in access prices reduces penetration about 2.6 percentage points and a $20 increase by 6.7 percentage points. For the high income households (those with incomes more than 6 times the poverty level) the effects are even smaller--less than 0.8 percent for a $10 increase and 2.1 percentage points for a $20 increase. But, for households in poverty, the

Figure 12

TELEPHONE PENETRATION BY INCOME GROUP AT ALTERNATIVE ACCESS PRICES

Income Group	Flat Rate/Measured Rate ($10/$6)	 ($20/$16)	 ($30/$26)
	(Percent)		
	(1)	(2)	(3)
Below Poverty Level	79.38%	70.28%	59.54%
1 to 2 Times Poverty Level	89.49	83.42	75.15
2 to 3 Times Poverty Level	93.88	89.87	83.90
3 to 4 Times Poverty Level	96.36	93.77	89.67
4 to 5 Times Poverty Level	97.50	95.66	92.65
5 to 6 Times Poverty Level	98.22	96.87	94.62
Above 6 Times Poverty Level	99.04	98.29	96.98
All	93.29	89.45	84.10

Note: Measured rates are assumed to be available for all.

effects are more dramatic. A $10 increase reduces penetration by 9.1 percentage points and a $20 increase reduces penetration by nearly 20 percentage points. Thus, increasing prices would markedly increase the spread in telephone penetration between low and high income households. With a $20 increase in all access prices, the spread in penetration between the lowest and highest income households would nearly double from 20 to 37 percentage points. Put another way, most people who drop off the telephone network when prices rise are low income households. Of those that leave when prices rise by $10, 27 percent are in poverty, 57 percent have incomes below twice the poverty level and about 85.0 percent are in the lower half of the income distribution. With a $20 increase, 24.5 percent of those dropping off are in poverty, 54.4 percent have incomes below two times the poverty standard and about 84 percent have below average incomes.

Figure 13

TELEPHONE PENETRATION BY INCOME GROUP WITH AND WITHOUT LIFE LINE RATES

Income Group	Base Case ($10/$6)[1] (1)	Without Life Line ($20/$16)[1] (2)	With Life Line ($20/$6)[1] (3)
Below Poverty Level	79.38%	70.28%	76.83%
1 to 2 Times Poverty Level	89.49	83.42	87.91
2 to 3 Times Poverty Level	93.88	89.87	92.87
3 to 4 Times Poverty Level	96.36	93.77	95.71
4 to 5 Times Poverty Level	97.50	95.66	97.05
5 to 6 Times Poverty Level	98.22	96.87	97.89
Above 6 Times Poverty Level	99.04	98.29	98.85
All	93.29	89.45	92.29

Note: Measured rates are assumed to be available for all.

[1] Flat Rate/Measured Rate.

The pronounced effect of increased access prices on low income households could be eliminated or mitigated by making a lower priced, life line service available to low income households. Figure 13 examines the impact on telephone penetration by income class of increasing access charges by $10, with and without the provision of a life line option. In this case, the life line option is a measured rate service with an access charge of $6 and a calling price of 9.5 cents per call. With no life line service, the $10 rise in access prices results in a 28 percentage point spread between the highest and lowest income households. If life line service is offered to those in poverty, the spread is reduced to 22 percentage points, which is scarcely above the level prevailing now. And since households in poverty constitute less than 12 percent of the population, the cost of this subsidy would be relatively small. Even if every household in poverty took the life line rates described here, the costs would only be $1.07 per month per residential telephone subscriber not in poverty. (See Figure 14.)

The provision of life line service to low income households is also a way to maintain high overall penetration while assuring that most households pay the full cost of access. Thus, without any life line option, raising access charges by $10 would reduce penetration from 93.29 percent to 89.45 percent. But providing life line service just to households in poverty would increase penetration to 90.2 percent. (See Figure 14.)

Figure 14

COSTS AND EFFECTS OF EXTENDING LIFE LINE RATES TO VARIOUS INCOME GROUPS

Group to Which Life Line Service is Made Available	Overall Telephone Penetration	Number of Additional Households	Cost per Household Paying the Subsidy	Cost per Additional Household
	(Percent) (1)	(1,000) (2)	--(Dollars per (3)	Month)--- (4)
No One	89.45	-	-	-
Below Poverty Level	90.20	539	1.07	116
Below 2 Times Poverty Level	91.06	619	3.90	196
Below 3 Times Poverty Level	91.65	425	9.16	310
Below 4 Times Poverty Level	91.96	224	18.04	493
Below 5 Times Poverty Level	92.13	120	33.28	698
Below 6 Times Poverty Level	92.21	58	57.36	960
All Subscribers	92.29	56	-	1,765

Of course, further increases in penetration could be achieved by extending the life line option to higher income households. But this results in large increases in the extent of the subsidy for relatively small gains in overall penetration. This is illustrated in Figure 14. By extending the life line option to the poverty population only, overall penetration was increased by

0.75 percentage points at a monthly cost of $1.07 per household not subsidized. Extending the life line rate to those whose incomes are 1-2 times the poverty level further increases penetration by an additional 0.9 percentage points but at a cost of $3.90 per month for those paying the subsidy. As the figure indicates, further extensions continue to yield successively smaller increases in penetration for successively larger increases in cost. At some point, the added gains are simply not worth the cost.

The cost of the subsidy per additional household on the network is also quite high. Thus, subsidizing only those in poverty costs $116 per month per added household. This is because, even for households in poverty, most would subscribe without the subsidy; consequently, the number of added subscribers is small by comparison with the number subsidized.

It is beyond the scope of this paper to evaluate the wisdom of such subsidies. While the policy raises penetration, it also requires significant transfers of income from one economic class to another. In addition, there are costs to administering the means test which would be associated with the provision of life line rates. Finally, if the revenues to cover the subsidy are raised by increasing the price for other telephone services, this results in inefficient patterns of consumption, the cost of which must also be taken into account in evaluating the subsidy. Despite these costs, the provision of life line rates may be preferable to the current situation in which high levels of penetration are maintained by subsidizing access prices for all households.

3.4 Externalities

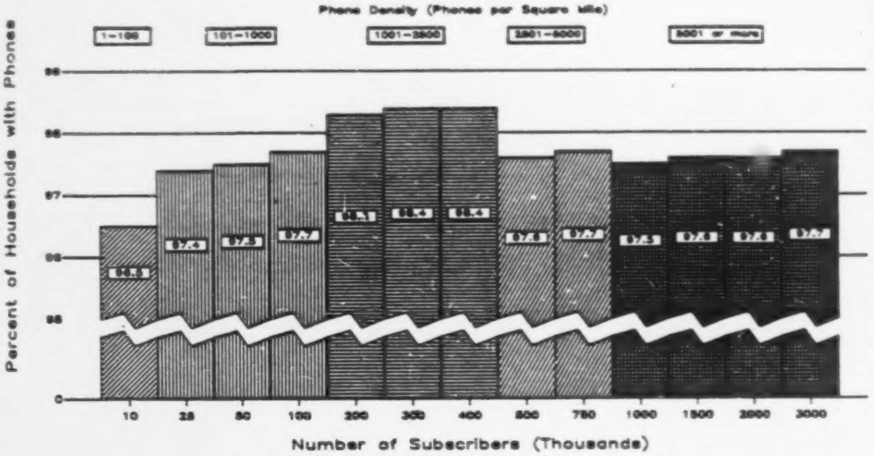
The costs of providing a household with telephone access has been variously estimated at $20 to $30 per month. Since this is well above current price levels, it seems clear that current telephone penetration rates can be sustained only by subsidizing access prices for some or all consumers. While it is not clear that such subsidies are justified, one argument for subsidization which has frequently been advanced is the existence of an externality in the market for telephone services. In this section, we explore the existence and magnitude of this externality and trace its implication for telephone access prices.

The externality in the demand for telephone service occurs because the value of telephone service to any one subscriber increases as the number of subscribers on the network increases. As network size increases, the value of telephone service increases. By setting low access prices, subscription to telephone service is encouraged and this increases the value of telephone service to each subscriber. Given this externality, access prices should be set somewhat below the marginal cost of access to assure the optimal size network. Of course, the extent to which price should be discounted below cost depends on the size of the externality and the price elasticity of access demand.

In the 1983 demand model we attempted, in a limited way, to measure the extent of the externality in demand for telephone service. In order to do this, the model includes measures of the number of phones and the number of phones per square mile in each subscriber's local calling area. This ignores the effect on demand of the number of subscribers outside the local calling area, but, given the sharp decline in calling volume that occurs with distance, much of the externality is likely to depend on the size of the local network. As illustrated in Figure 15, access demand does appear to be positively related to the number of phones in the calling area. It also appears to be positively related to phone density at least up to 2,000 phones per square mile. In excess of 2,000, however, phone density appears to be inversely related to telephone demand. One should not infer from this result that there is no externality or a negative externality beyond some density level. It is just that phone density is an

FIGURE 15

TELEPHONE PENETRATION BY NUMBER OF PHONES AND PHONES PER SQUARE MILE IN THE LOCAL CALLING AREA



Note: Estimates made assuming $10.00 flat rate, no measured rates available and mean values for other characteristics.

imperfect proxy for network size. Where phone density is very high, population density is also high. As population density rises it becomes increasingly easier to reach people by means other than a phone. In very dense cities, for example, most people live very close to people they know and can easily reach those people by visiting instead of phoning them. Since phone density and population density are very closely correlated, the phone density variable provides a statistically biased measure of the network externality.

The number of phones in the calling area also is an imperfect measure of network size. This is because, controlling for phone density, areas with a large number of subscribers in the local calling area are those which are extensive in area. While increasing the size of the calling area may increase the number of people one can reach, it also increases the average distance between subscribers and, therefore, decreases their community of interest. For this reason, both the effect of phone density and the effect of total number of subscribers may understate the true externality.

While this reasoning suggests that we may have understated the externality, for other reasons the externality might be overstated. As the size (in area) of the local network increases, this also increases the number of people a subscriber can call at no additional charge and decreases the number to whom toll calls are made. This conveys a monetary benefit to subscribers which would not occur if network size were increased by raising the fraction of households subscribing.

Despite these limitations, it is interesting to use the relationship between access demand and both number of phones and phone density to roughly estimate the effect of increasing network size on the value of telephone service. Figure 16 shows the estimated value of telephone service (consumer surplus) for the typical household at different levels of local network size--varying from 25,000 to 500,000 subscribers. This value was derived by estimating a demand curve at each network size and integrating the demand curve with respect to access price. Since we are interested in the value of service to all households, we integrated from prices of zero to infinity. In doing this calculation, we assumed a calling area of fixed geographic size and we chose the areas to assure that phone density would not exceed 2,000--this allowed us to ignore the negative effects of increases in density which occur in excess of this level. Implicitly, then, increases in network size are achieved by increasing the population density or percent of households subscribing. The results imply that with 25,000 local subscribers the value of telephone service (for the average subscriber) is $56 per month; raising the size of the local network to 50,000 increases this value to $60 or by 8 percent; raising the size to 100,000 increases the value to $62 or by another 2 percent and with a network of 500,000 subscribers, value is $68 per month. Thus, subject to the constraints noted above, increasing network size increases the value of telephone service.

Figure 16

VALUE OF TELEPHONE SERVICE TO THE AVERAGE HOUSEHOLD AT VARIOUS LOCAL NETWORK SIZES

Network Size (Number of Subscribers)	Phones per Square Mile	Value of Telephone Service
25,000	100	$56.02
50,000	200	60.38
100,000	400	61.55
500,000	2,000	68.40

Using this measure of the externality, we also calculated the extent to which access prices would be set below access cost if the objective were to optimize network size. This was done by selecting a price which maximized the sum of consumer and producer surplus. With a $20 access cost, the model implied that prices should be set at $13 to $18 depending on population density. At a $30 access cost, optimal prices ranged from $23 to $28. Averaged across all density bands, optimal access prices were about $4 below cost. The results are summarized in Figure 17.

The gains in social welfare, however, from setting prices below cost appear to be very modest. At a $20 access cost, they ranged from about

Figure 17

OPTIMAL TELEPHONE ACCESS PRICES AT ALTERNATIVE ESTIMATES OF ACCESS COST AND POPULATION DENSITY

	Access Cost = $20		Access Cost = $30	
Population Density (Pop./Sq. Mi.)	Optimal Price	Gain in Social Welfare[1]	Optimal Price	Gain in Social Welfare[1]
	-------(Dollars per Household per Month)-------			
	(1)	(2)	(3)	(4)
50	$17.62	$0.0121	$27.63	$0.0202
500	14.57	0.0692	24.64	0.1009
1,250	13.46	0.1016	23.25	0.1624
3,000	18.17	0.0094	28.08	0.0137
Average[2]	$15.88	$0.0469	$25.88	$0.0709

[1] This is the gain (consumer surplus plus producer surplus) attributable to charging the optimal price rather than the cost-based price.

[2] The averages given are weighted averages based on the percentage of the population living in areas of the specified densities.

1.0 cent to 10.2 cents per household per month. At the $30 access cost, the gain ranges from 1.4 cents to 16.2 cents per household per month. Averaged across all density bands, the gains were about 5.0 cents per household per month when costs were $20 and about 7.0 cents when costs were $30. These gains simply may not justify the administrative burdens associated with subsidizing access. Moreover, the degree of subsidy calculated here would be appropriate only if the subsidy were raised via a lump sum tax on all individuals, whether or not they subscribe to telephone service. If instead the subsidy were raised by increasing the price of some component of usage, the optimal subsidy and the welfare gains from the subsidy would be lower. The optimal subsidy would also be lower if subsidization were accomplished by raising access prices for some subscribers in order to reduce access prices for others. This is because, in these cases, we would have to adjust the optimal size of the subsidy to reflect the efficiency losses associated with setting other telephone prices above cost. And, since these efficiency losses may be large relative to the welfare gains from increased network size, the desirability of any subsidization may be markedly reduced if the revenue loss must be made up by setting usage charges above costs. Further, while we find these externality effects to be of interest, many simplifying assumptions had to be made to derive these measures from the access demand model. More research is needed if the externality is to be measured with sufficient confidence to be used for policy purposes.

3.5 Other Household Characteristics

While perhaps less relevant to the current debate over access prices, a number of other interesting relationships between telephone penetration and the economic and demographic characteristics of areas and households are contained in the current model. In particular, the model provides estimates of the effect on telephone penetration of the age, education, race and employment status of the household head; the number of people living in the household; and the age composition of members of the household. In addition, the model distinguishes among five household types: husband/wife households; male-headed, family households with no wife present; female-headed households with no husband present; male-headed, nonfamily households; and female-headed, nonfamily households. A family household is one in which one or more of the household members are related to each other and a nonfamily household consists of individuals living together who are not related or individuals living alone. The model also distinguishes between households located in the South and those in other regions; and distinguishes households where a language other than English is spoken and those in which English is not spoken well.

In Figures 18 to 21, we have summarized the effect of each of these variables on telephone penetration. In each case, the effects described in these tables reflect the consequence of changing the variable in question for a household with average characteristics. Figure 18 describes the effects on telephone penetration of varying age, education and persons per household. It suggests that as education increases from 8 years to 16 years, expected penetration rises by 3.0 percentage points for the average household. An increase in the age of the household head from 25 to 55 is associated with an

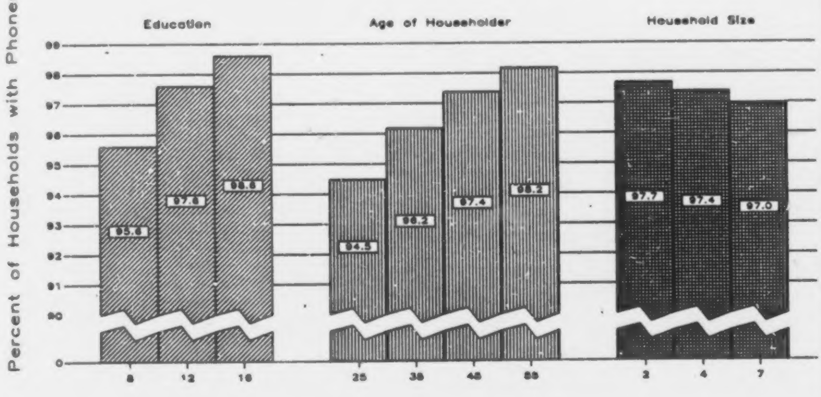


FIGURE 18

TELEPHONE PENETRATION
BY EDUCATION, AGE AND HOUSEHOLD SIZE

Note: Estimates made assuming $10.00 flat rate, no measured rates available and mean values of variables other than those under consideration.

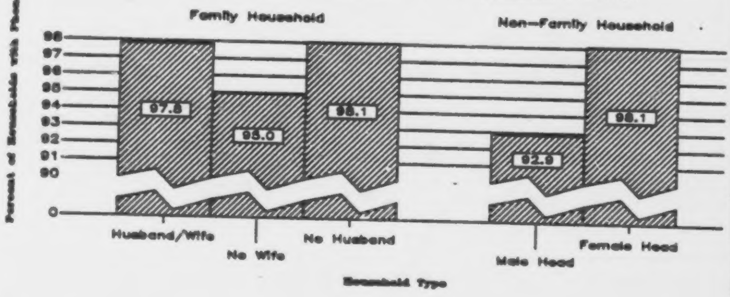
increase in penetration of 3.7 percentage points. Finally, as household size increases from 2 to 7 persons penetration rises by 0.7 percentage points.

The effect of household size may seem somewhat counterintuitive since undoubtedly increasing the number of people in a household would be expected to increase demand for telephone service. But in varying household size, we are holding household income constant. With household income held constant, the household's ability to afford telephone service falls as household size increases, because income per capita decreases.

Figure 19 describes the effect of household type on telephone demand. As this figure makes clear, husband/wife households and female-headed househol~~ds, have~~ very much the same levels of demand for telephone service. On the other hand, family households with no wife present and male-headed households, whether family or nonfamily, have a markedly lower demand. This result seems intuitively quite plausible. For many households, telephones provide a source of security. It is reasonable to expect that the perceived need for such security is less predominant in male households than in households headed by a female or husband/wife households.

FIGURE 19

TELELPHONE PENETRATION BY HOUSEHOLD TYPE

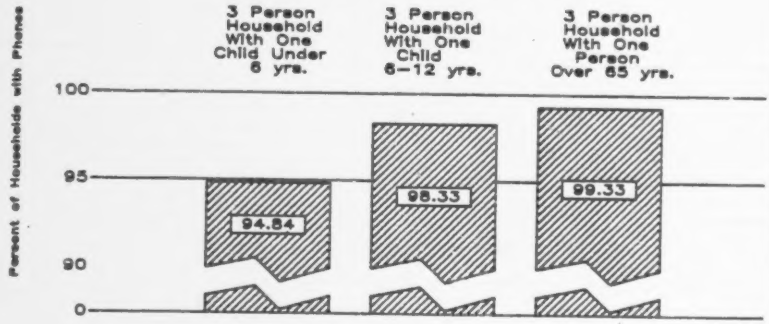


Note: Estimates made assuming $10.00 flat rate, no measured rates available and mean values for other characteristics.

Figure 20 describes the effect of family composition on demand for telephone service. The comparisons suggest that households with a high proportion of children 6-12 years old or a high proportion of people over 65 are more likely to have phones than families with younger children (under 6 years old) or with no children.

FIGURE 20

TELEPHONE PENETRATION FOR HOUSEHOLDS WITH DIFFERING COMPOSITIONS

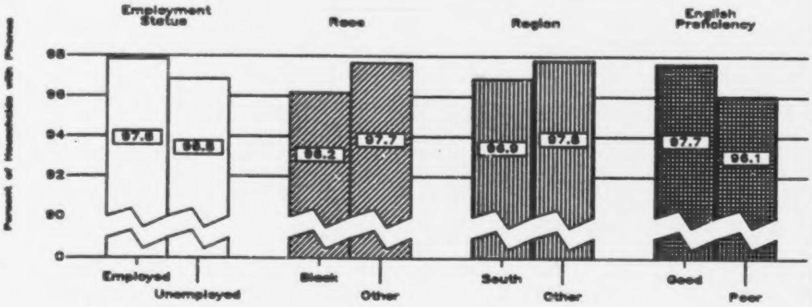


Note: Estimates made assuming $10.00 flat rate, no measured rates available and mean values for variables other than household composition.

Figure 21 describes the effects on access demand of a number of indicator variables included in the model. As this table indicates, there are small differences in penetration between employed and unemployed householders, between blacks and whites, between people living in the South and in other regions and between people who speak English proficiently and those who do not.

FIGURE 21

TELEPHONE PENETRATION BY EMPLOYMENT STATUS, RACE, REGION AND ENGLISH PROFICIENCY



Note: Estimates made assuming $10.00 flat rate, no measured rate available and mean values for variables other than those specified above.

Overall, this examination of the effect of individual household characteristics may suggest that the effect of each of these characteristics on telephone demand is relatively moderate. While this is the case for a household with average characteristics, the effect of varying demographic characteristics is much greater for low income households or for other households with low predicted probabilities of subscription. This can be seen in Figure 22 where we have estimated penetration rates for households classified by age, income and household type.

Figure 22

TELEPHONE PENETRATION RATES BY INCOME, AGE AND HOUSEHOLD TYPE

Household Type/ Age	Below Poverty ($3,491)[1] (1)	1-2 Times Poverty ($8,636)[1] (2)	2-3 Times Poverty ($15,152)[1] (3)	3-4 Times Poverty ($20,761)[1] (4)	Above 6 Times Poverty ($44,822)[1] (5)
Male Individual					
25	53.32%	66.66%	78.88%	85.58%	95.18%
45	73.19	82.24	89.27	92.75	97.36
65	86.71	91.47	94.88	96.50	98.56
Female Head, 2 Children Between 6 and 12 Years of Age					
25	84.24	90.34	94.59	96.53	98.93
45	92.74	95.59	97.50	98.36	99.42
65	96.83	98.05	98.86	99.23	99.69
Husband and Wife					
25	79.05	86.85	92.50	95.15	98.49
45	90.01	93.86	96.49	97.69	99.18
65	95.56	97.26	98.39	98.91	99.56

[1] Mean income for the group

At a low income level (below poverty), there are marked disparities by household type and age. The penetration rate for a single male individual aged 25 was 53.3, while that for an aged couple with the same income is 95.6 percent and that for a female-headed household with two young children is 84.2-96.8 percent, depending on the age of the head. At high income levels there are much more modest disparities. With $21,000 in income, the probability of having a telephone is 85.6 percent for a single male individual, 96.5-99.2 percent for the female-headed household and 98.9 percent for aged husband/wife households. Thus, at average income levels, penetration is high for all households; at lower income levels there are sharp differences by household type and age of head.

Differences in penetration rates by household characteristics will also be mirrored in differences in price elasticity. For households with high probabilities of having a phone, price effects are small; for those with lower probabilities the price effects are much larger. This result is illustrated in Figure 23 where we have summarized the price elasticity of telephone demand for households classified by income, age and household type. As is clear from this figure, price elasticities are quite low for each group--never higher than -0.20--but the highest elasticities are observed for young, low income, male household heads. Older household heads, female-headed households, and husband/wife households have low elasticities regardless of income.

These results should serve to reduce some of the political concerns which have been expressed regarding higher access prices. Much of this concern apparently arises from the fear that households which need a phone for security--the aged and female-headed households--will no longer be able to afford phone service. This result suggests that these households will continue to subscribe even at prices well above current levels.

These comparisons illustrate another very important point. While income and price are very important determinants of telephone demand, they are by no means the only determinants. Education, family type and age all play a very important part in the demand for telephone service. Thus, controlling for income and price, telephone demand is heavily influenced by other factors which influence the taste and need for telephone service. This result should be a source of concern to those seeking to establish any specified level of telephone

Figure 23

PRICE ELASTICITY
BY INCOME, AGE AND HOUSEHOLD TYPE

Household Type/ Age	Below Poverty ($3,491)[1] (1)	1-2 Times Poverty ($8,636)[1] (2)	2-3 Times Poverty ($15,152)[1] (3)	3-4 Times Poverty ($20,761)[1] (4)	Above 6 Times Poverty ($44,822)[1] (5)
Male Individual					
25	-0.1977	-0.1412	-0.0894	-0.0611	-0.0204
45	-0.1135	-0.0752	-0.0454	-0.0307	-0.0112
65	-0.0563	-0.0361	-0.0217	-0.0148	-0.0061
Female Head, 2 Children Between 6 and 12 Years of Age					
25	-0.0667	-0.0409	-0.0229	-0.0147	-0.0045
45	-0.0307	-0.0187	-0.0106	-0.0069	-0.0025
65	-0.0134	-0.0083	-0.0048	-0.0033	-0.0013
Husband and Wife					
25	-0.0887	-0.0557	-0.0318	-0.0205	-0.0064
45	-0.0423	-0.0260	-0.0149	-0.0098	-0.0035
65	-0.0188	-0.0116	-0.0068	-0.0046	-0.0019

[1] Mean income for the group

penetration as a social goal. The least costly way to achieve such a goal is to subsidize consumption for households whose price elasticity is relatively high. Where price elasticity is high only for low income consumers, who presumably are limited in their ability to pay, such a policy might seem to make sense. But if price elasticity is high for many consumers because their taste for telephones is low, such a policy is obviously inefficient. It results in society providing subsidies to increase telephone penetration for the very people who value it the least. It would make much more sense to simply subsidize income and let consumers spend the money as they wish.

3.6 Measures of Fit

In evaluating the 1983 access demand model it is important to determine how accurately the model predicts telephone penetration. To make this evaluation we have examined the ability of the model to predict penetration in each of the lower 48 states and the District of Columbia. A comparison of actual and predicted values for each of these states is summarized in Figure 24a. For 18 states, representing more than half (56.6 percent) of the population, the forecasts were within 0.5 percent of the actual values. For an additional 9 states, with 15 percent of the population, the forecast is between 0.5 and 1.0 percentage points of the actual value. Thus, for states containing 71.5 percent of the population, the forecast is within 1.0 percent of the actual value. There are also 12 states containing 22.2 percent of the population in which the forecast is between 1.0 and 2.0 percent of the actual value. Consequently, the forecast is within 2.0 percent of the actual value for states containing 94 percent of the population. Of the remainder, there are errors of 2-3 percent in six states containing 3.8 percent of the population, errors of 3-5 percent in two states with 0.5 percent of the population and errors of 5-7 percent in two states. Based on a linear regression relating actual penetration to predicted penetration by state, the model accounts for 80 percent of the interstate variation in telephone penetration rates. The standard error of estimate based on the regression is 1.32 percentage points. Actual and predicted penetration by state are compared graphically in Figure 24b.

The errors in estimating telephone penetration by state do not seem entirely random. The model generally seems to over predict penetration in the Mountain Bell states and almost all of the most serious errors occur in these states. The only exception occurs in Utah where the model under predicts. In

Figure 24a

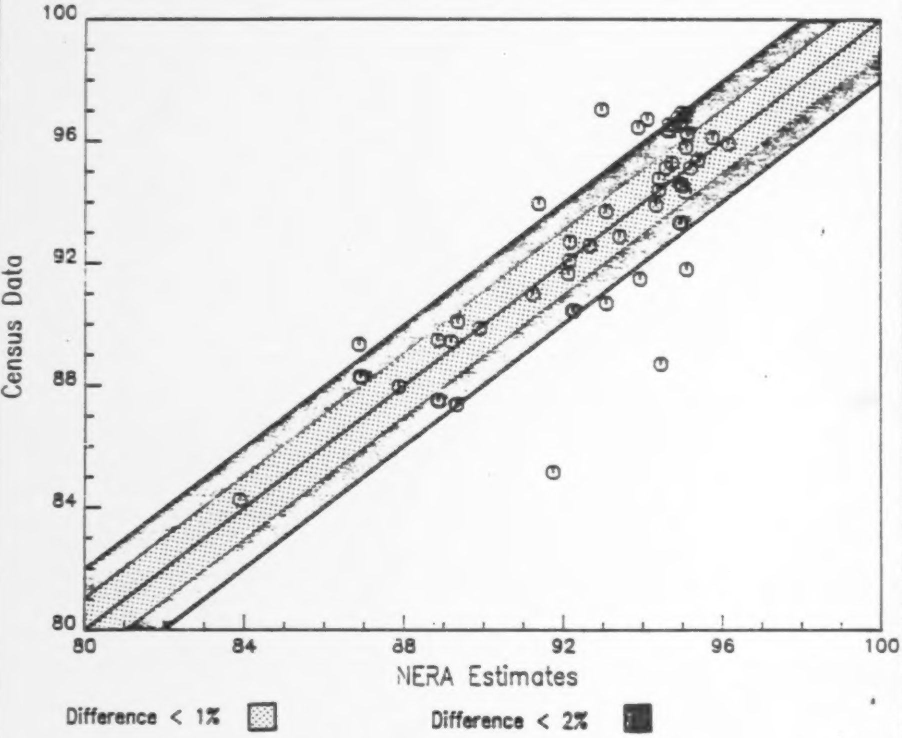
ESTIMATED AND ACTUAL TELEPHONE PENETRATION BY STATE

	NERA Est. (1)	Census (2)	Diff. (1)-(2) (3)	House-holds (4)
Difference<0.5%				
Pennsylvania	95.76	96.13	-0.37	3,777
Indiana	94.41	94.78	-0.37	1,649
Mississippi	83.88	84.24	-0.36	812
W. Virginia	89.19	89.43	-0.24	681
Alabama	87.87	87.96	-0.09	1,321
New Jersey	95.40	95.40	0.00	2,523
New York	94.41	94.41	0.00	4,505
N. Carolina	89.90	89.87	0.03	1,421
Vermont	92.15	92.09	0.06	177
California	95.21	95.14	0.07	8,192
Maine	92.67	92.58	0.09	391
Connecticut	96.16	95.93	0.23	1,081
Texas	91.24	90.98	0.26	4,822
Washington	94.94	94.61	0.33	1,279
Illinois	94.95	94.61	0.34	3,766
Oregon	94.34	93.91	0.43	985
Virginia	92.12	91.66	0.46	1,690
Missouri	95.01	94.54	0.47	1,702
Total Households in Group				40,774
Households in Group as a Percent of Total Households in Sample				56.65%
Difference 0.5-1%				
Tennessee	89.35	90.09	-0.74	1,443
Massachusetts	95.10	95.81	-0.71	2,003
S. Dakota	93.08	93.70	-0.62	138
Kentucky	88.85	89.47	-0.62	1,064
New Hampshire	94.74	95.30	-0.56	319
Kansas	94.59	95.14	-0.55	864
Oklahoma	92.17	92.70	-0.53	1,109
Idaho	93.42	92.88	0.54	323
Ohio	95.07	94.34	0.73	3,304
Total Households in Group				10,667
Households in Group as a Percent of Total Households in Sample				14.82%

	NERA Est. (5)	Census (6)	Diff. (5)-(6) (7)	House-holds (8)
Difference 1-2%				
Wisconsin	94.98	96.94	-1.96	1,471
Minnesota	94.89	96.79	-1.90	1,276
Maryland	94.66	96.56	-1.90	1,453
Iowa	94.79	96.54	-1.75	1,041
Rhode Island	94.64	96.37	-1.73	331
Utah	94.96	96.62	-1.66	444
Arkansas	86.91	88.28	-1.37	802
Michigan	95.13	96.25	-1.12	3,066
Florida	92.25	90.44	1.81	2,478
S. Carolina	88.86	87.51	1.35	921
Colorado	94.95	93.33	1.62	899
Georgia	89.32	87.38	1.94	1,822
Total Households in Group				16,004
Households in Group as a Percent of Total Households in Sample				22.23%
Difference 2-3%				
Nebraska	94.12	96.73	-2.61	490
N. Dakota	93.89	96.46	-2.57	226
D.C.	91.39	93.95	-2.56	248
Louisiana	86.87	89.34	-2.47	1,285
Montana	93.08	90.69	2.39	290
Nevada	93.93	91.49	2.44	235
Total Households in Group				2,774
Households in Group as a Percent of Total Households in Sample				3.85%
Difference 3-5%				
Delaware	92.97	97.04	-4.07	203
Wyoming	95.10	91.81	3.29	171
Total Households in Group				374
Households in Group as a Percent of Total Households in Sample				0.52%
Difference >5%				
Arizona	94.45	88.71	5.74	948
New Mexico	91.74	85.16	6.58	438
Total Households in Group				1,386
Households in Group as a Percent of Total Households in Sample				1.93%

FIGURE 24b

ESTIMATED AND ACTUAL TELEPHONE PENETRATION BY STATE



Note: NERA estimates are averages of estimates made for each household in a state by applying the 1983 model to the household's characteristics.

contrast, the model under predicts in both the North and South Central regions. This includes the areas served by the Northwestern and Southwestern Bell Telephone Companies. This systematic pattern suggests that the model omits some variable or variables which account for regional variations in telephone demand.

In addition to this overall measure of fit, Figure 1 provides t-statistics for each of the parameters of the logit model. As is clear from these values, most of the parameters are measured with a high degree of reliability, and generally, we can reject with some confidence the hypothesis that these parameters are zero. With the exception of the installation price and the extent of measured rate service, this hypothesis can be rejected at the 5.0 percent level or greater for all parameters.

While these results generally suggest that the model explains a substantial portion of the observed variation in telephone demand, they also suggest the usefulness of some additional work. It might be particularly fruitful to explore the factors which account for the regional variations in the model's residuals.

4.0 METHODOLOGY IN DEPTH

While Section 2.0 of this paper lays out in a general way the methodology used to develop the current demand model, it skims lightly over a number of important methodological details. Those details are discussed more fully in this section. Specifically, this section covers three subjects. First, we examine the rationale for the specific form of the function relating telephone demand to price and economic and demographic variables. Second, we examine the price variables included in the model and those that have been excluded. This subsection also describes the development of the price data base from which the model was estimated. Third, we examine the economic and demographic variables used in the model, and finally we describe the methods used to make forecasts of penetration from the model.

4.1 Model Specification

As suggested in Section 2, the current demand model forecasts the log of the odds of telephone demand as a linear function of telephone price and various economic and demographic characteristics. That is:

$$\ln \left(\frac{Pr}{1-Pr} \right) = a + bX$$

where:

Pr = the probability of the household subscribing to telephone service;

X = a vector of price and demographic characteristics; and

a,b = the parameters of the model.

(The model used is strictly linear in the parameters but some non-linearities have been assumed with respect to the effects of income, age, and size of calling area. These non-linearities are accounted for by including variables measuring the square of income, the product of income and age, and the number of subscribers in logs.)

The rationale for using this form of the demand equation and the broad classes of variables included can be explained in the following manner. The decision to subscribe to telephone service is presumably based on comparing the value of telephone service with the price of access. A consumer subscribes if:

$$V_a + CSu > P_a$$

where:

V_a = the value to the consumer from having access to the network, independent of his usage;

CS_u = the value the consumer derives from usage, in excess of the price charged for usage (consumer surplus); and

P_a = the price of access to the telephone network.

Since subscribing to telephone service involves both an installation charge (which is non-recurring) and a monthly service charge, the price of access can be expressed as:

$$P_i + P_s \int_o^n e^{-\delta t} dt$$

where:

P_i = a one-time installation charge;

P_s = a recurring monthly service charge;

δ = the consumer's discount rate (on a monthly basis); and

n = the time period over which the household expects to remain at its current address.

In this context, the value of access V_a and the consumer surplus from usage CS_u represent discounted present values over time.

For any household, the value of access and consumer surplus from usage are functions of household income, the price charged for usage, some measurable household characteristics (education, age, etc.) and some unmeasured taste characteristics. Consequently, the conditions under which the household subscribes can be rewritten as:

$$g(P_u, Y, X, \varepsilon) > P_i + P_s \int_0^n e^{-\delta t} dt$$

where:

P_u = the price of usage;
X = measured household characteristics;
Y = household income;
ε = unmeasured tastes and characteristics.

If we further assume that g is a linear additive function of price, income and tastes then the rule becomes

$$a + b_1 P_u + b_2 Y + b_3 X - b_4 P_i - b_5 P_s < -\varepsilon$$

and the probability of the household subscribing to phone service is:

$$Pr = 1 - \int_{-\infty}^{-K} f(\varepsilon)\, d\varepsilon$$

where:

$K = a + b_1 P_u + b_2 Y + b_3 X + b_4 P_i + b_5 P_s$; and
$f(\varepsilon)$ = the density function for ε.

If ε, the random taste factor, is assumed to be distributed such that its cumulative density function is logistic, then

$$Pr = e^K/1 + e^K$$

or

$$\ln\left(\frac{Pr}{1-Pr}\right) = a + b_1 P_u + b_2 Y + b_3 X + b_4 P_i + b_5 P_s.$$

How plausible are the assumptions used to derive this result? The assumption of a logistic distribution for unmeasured tastes seems quite reasonable. This assumes that tastes are symmetrically distributed around some mean value, and that the probability of any specified value decreases asymptotically toward zero as the taste for phone service is either decreased or increased around the mean. Obviously the logit function is not the only density function exhibiting such properties, but other functions with similar properties would yield similar results. Thus, if tastes were assumed to be normally distributed, we could have used the cumulative normal density function. This is referred to as probit analysis and experimentation at the time of the 1978 analysis suggests that probit and logit analysis yield generally similar results.

The assumption that consumer surplus is linear in the parameters is a much more heroic assumption. It seems particularly unlikely to be accurate with respect to usage price. Thus, for a commonly used demand function for telephone usage,

$$D = Ae^{-\gamma P_u}$$

consumer surplus is:

$$\frac{Ae^{-\gamma P_u}}{\gamma}$$

which is clearly not linearly related to the price of usage. For the purpose at hand, however, this is not likely to be critical. For almost any demand function, the derivative of consumer surplus with respect to a change in price is approximately equal to the quantity consumed at that price level. The linear model assumes the quantity is constant, regardless of the level of price or other variables. While this is undoubtedly not true, it may not be a bad approximation if usage demands are highly inelastic (as they are argued to be) and as long as the range of usage prices considered is relatively narrow.

The logistic demand model has several interesting properties which have influenced the choice of this specific model. First, the derivative of the probability of having a phone with respect to any of the price or demographic variables in the model is:

$$b_i * Pr * (1-Pr)$$

where:

b_i = the parameter relating the logit to the i^{th} variable

Pr = the probability of having a phone

Thus, the derivatives are at a maximum when the a priori probability of having a phone is 0.5 and diminish toward zero as the probability rises toward 1.0 or falls toward zero. In general this seems reasonable. It implies that changes in price and other policy variables will have their greatest effect on households which are on the edge between choosing and not choosing to subscribe. Households for which subscription is either very valuable or not valuable at all would be more difficult to influence.

This form for the derivatives also creates an interesting (and we think plausible) pattern of second derivatives. As long as the a priori probability ranges from 0.5 to 1.0 (as it generally does with respect to telephone demand) an increase in any variable which is positively related to the probability of telephone demand decreases the (absolute value of the) derivatives of the probability with respect to all other variables in the model. So, for example, since household income is positively related to the probability of having a phone, increasing income decreases the effect of price. Thus, high income families will have lower price elasticities than low income families. There are also similar interactions among the price variables. In areas offering both flat and measured rate options, both prices are inversely related to demand. As a consequence, increasing the price of flat rate service increases the effect of measured rate prices and vice versa. These patterns of interraction seem quite plausible and were a primary reason for selecting this functional form.

Despite this plausibility, one must be cautious about inferring that the "model" demonstrates these relationships. Obviously, if this functional form were totally inconsistent with reality, the model would not fit the observed data. But other functional forms with different implications might also provide good fits.

In determining the direction and order of magnitude of effect for key variables within the observed range of those variables, the choice of functional form may not be too critical. A number of forms are likely to lead to quite similar results. However, as we begin making projections outside the range of observation, the results may become quite sensitive to functional form. And the imposition of cost-based pricing may well result in access prices which are outside the range of historical prices. In using this model (or any model) to predict the effect of price changes which are outside the range of historic experience, great caution should be used.

4.2 Price Variables

There are four price components included in the 1983 model--the flat rate access price, the measured rate access price, the measured rate calling price and the installation charge. The measures of price are introduced into the model in the following way:

$$\ln(\frac{Pr}{1-Pr}) = a + b_1 * FRF * (1-MRP) + b_2 * FRM * MRP$$

$$+ b_3 * MRA * MRP + b_4 * MRC * MRP + b_5 INS + b_6 * MRP$$

where: FRF = the monthly service charge for flat rate service in areas offering only flat rate service

FRM = the monthly service charge for flat rate service in areas offering measured rate service

MRA = the measured rate access price in areas offering measured rate service

MRC = the measured rate calling price in areas offering measured rate service

INS = the installation price

MRP = the proportion of subscribers in an area for whom measured rate service is available

This specification enables us to handle three types of areas in a single model. In areas which offer only flat rate service, the variable MRP = 0 and, consequently, demand is a function only of the installation price and the monthly service charge for the flat rate service. (Since the coefficients of the measured rate prices are multiplied by the MRP, these coefficients are effectively set to zero in flat rate areas.) In areas that offer measured rate service to all households, MRP = 1; consequently, access demand is a function of the flat rate price in measured rate areas and the measured rate prices. Since there are two separate coefficients for flat rate prices (one for flat rates in measured rate areas and one for flat rates in exclusively flat rate areas), the effect of the flat rate price is allowed to be different where both flat and measured rate service are offered and where only a flat rate service is offered. In areas which offer both flat and measured rate service to some subscribers, but only flat rate service to others, MRP equals the proportion of subscribers offered measured rate service. In these areas, demand is also a function of the flat rate price and the measured rate price, but the effect of flat rate prices is assumed to be a weighted average of effects in areas offering only flat rate service and in areas offering both flat and measured rate service. And the effect of measured rate prices is reduced to the extent that measured rate service is offered only to a portion of subscribers. By including MRP as a variable, the model also allows the intercept to be different (presumably higher) in measured rate areas. This reflects the fact that, holding flat rate prices constant, we would expect demand to be higher in areas offering measured rate service than in those not offering such service.

A number of price components have been excluded from this analysis. First, all of the prices used in this analysis are for one-party service. However, in most exchanges, two-party service is also available (at a lower access price) and some exchanges offer four- or eight-party service as well. The prices of multi-party service have generally been ignored. (The exception occurs in areas where measured rate service is offered only as a two-party option; in these areas, the price of the two-party measured rate service is used in place of one-party measured rate.)

The omission of the two-party service price reflects several factors. In almost all Bell exchanges, one-party service is the option chosen by most consumers. In addition, in some areas, two-party service has been grandfathered; it is available to customers who have had it in the past, but is not available to others. Finally, there appears to be too much collinearity between the prices of one-party and two-party service to measure their separate effects with precision. Efforts to measure the separate effects of one- and two-party service did not yield statistically significant coefficients. Since the price of two-party service is not included in our demand model, and since this price is closely correlated with the price of one-party service, it is probably most appropriate to treat the estimated effect of increasing the access price for one-party service as a proxy for the effect of simultaneously increasing the price of one- and two-party service. We have tried to explore the validity of this interpretation by examining the separate effects of prices for one- and two-party service and the results are discussed in Sections 3.2 and 5.0.

The second simplification is in the description of the measured rate option. Many exchanges offer several measured rate options with various access and calling prices. Often, the consumer is offered a choice between paying a low access charge with a high usage price or a higher access charge and a lower usage price. In this analysis, we included only that measured rate option which was cheapest at a usage level of 30 calls. In at least one model, we examined the effect of several alternative measured rate options, but could not obtain plausible effects for the separate prices of these options. Once again multicollinearity appears to be at the heart of the problem.

In characterizing the measured rate option, we have also ignored the effect of calling allowances and time of day discounts. Generally the measured rate options examined in this study provide the user with a certain number of calls for which there is no charge. This is referred to as a calling allowance. The size of the calling allowance, which should be positively related to calling demand, is also not included in the model. This is because when this variable was included it had the wrong sign. While we have no completely satisfactory explanation for this result, it should be noted that there was little variation in the size of the calling allowance across areas, and that calling allowance was closely correlated with the measured rate access price. Time of day discounts were ignored in calculating calling prices because we did not have sufficient data on the time distribution of residential calls.

The third simplification involves the omission of prices charged for toll calls and prices charged for extended area service options. Extended area service enables the user to extend his local service area to include areas otherwise covered by toll calls. With respect to both toll charges and extended area service, including these charges would have markedly increased data collection problems and the complexity of the model. Moreover, both prices were expected to have quite limited effects on access demand. However, with the data now available it would be possible to extend the model to include these prices and such extension would be useful in future research in this area.

In evaluating the current model it is important to understand how the price data used in this analysis were developed. As the first step in this analysis, we obtained rate data for each of the 7,260 Bell exchanges in the United States. For each of these exchanges, Bell Operating Companies were asked to report the prices for each of the rate options available to consumers in June of 1980. This was the closest point to the date of the Census survey (April of 1980) for which we could easily obtain data. The rate options for which we collected data included flat rate service, measured rate service and, where available, extended area service. For each rate option, we determined the access price, the calling price (if any) and the size of the calling area to which the rates apply. Where the calling price of the measured rate service option varied with distance, we obtained data on the rate level in each distance zone and the number of subscribers in that zone. Where the calling price for measured rate service was timed, we obtained data on the price per minute. We also obtained data on the number of total and residential main lines in each exchange and located each exchange in one of the 1,154 geographic areas identified in the public use sample of the Census. In most cases, this involved assigning the exchange to a county, but in some cases, exchanges were assigned to a city or part of a county where narrower definitions were available from the Census.

These rate data were then processed to assure comparability across exchanges. The process of assuring comparability involved several steps. First, in some areas the size of the calling area varies from option to option. For example, the size of the calling area may be different if the user takes a flat rate or measured rate service. For simplicity we defined a basic flat rate calling area (which was the least extensive flat rate calling area offered) and then matched the measured rate calling area to the flat rate calling area. That is, in pricing out the measured rate option we included calling prices only for the area which was coterminous with the smallest flat rate calling area.

Second, in order to simplify the analysis of calling price, distance sensitive and time sensitive measured rates were converted to a price per call. For timed calls we calculated the average costs for a representative sample of calls of varying lengths. For distance-sensitive rates, we constructed a weighted average of calls of varying distances. The distribution of calling lengths and the distribution of calling distances were both obtained from the Bell Central Services Organization (CSO). The distribution of calling lengths is based upon a large and representive sample drawn from 1972 to 1976. The distribution of calling distances, however, is based upon data for a very small number of exchanges and may not be representative.

The third step necessary to assure comparability was to reduce the number of rate options to a manageable number. For this purpose, we priced out all available options for a person wishing to make 30 calls, 50 calls and 100 calls and retained data only on those measured rate options which were cheapest at each of these calling volumes.

Once the adjustments described above had been made to the rate data for each exchange, it was then possible to establish data on average rates for each of the 1,154 geographic areas identified in the Census. For this purpose, rate data for each of the exchanges which make up a Census area were averaged. In deriving average rates for each Census area, rate data for each exchange were weighted by the number of residential main lines in that exchange. Where particular rate options (measured rate service, for example) were available in some exchanges serving a Census area but not in others, the average rate only reflects data for those exchanges in which the service was offered. However we also estimated the proportion of the main lines in the Census area for which the service was not available. Using this approach we estimated average rates for 1,013 of the original 1,154 Census areas. In the other 141 areas, there were no Bell exchanges. Moreover, examination of data for the 1,013 areas indicated that some Bell exchanges served more than one Census area. This resulted in our initially having too many Bell main lines in some Census areas and an insufficient number of Bell main lines in others. To alleviate this problem, some closely adjoining Census areas were combined. After this aggregation, there were 868 areas for which we estimated rates.

Of course, some of these areas are also served by telephone companies other than Bell. We identified the extent of this problem by comparing the number of households in each Census area with the sum of residential main lines in exchanges assigned to the area. Where the number of main lines was far below the number of households, we assumed that Bell was not the predominant supplier. Although the Bell rates in these areas may not accurately represent average rates for the areas as a whole, we did not drop these data points from the final analysis. This is because when we experimented with dropping these areas it had no effect on the results. However, the precision of our results obviously could be improved if we could obtain data for independent telephone companies in those areas in which Bell is not the predominant supplier.

Once we had assembled rate data for each of these 868 Census areas, they were merged with household data in each of these areas. That is, the average rate for each Census area was assigned as a measure of applicable rates to each household in the sample. This resulted in assigning rates to 71,979 of the 80,428 households for which we had data from the Census. The 8,449 excluded households are those in Census areas in which there are no Bell telephone exchanges.

The data base used in this analysis includes all Bell exchanges except those serving New York City. This is because the NERA model assumes that flat rate service is available to all subscribers. But in New York City, there is no flat rate option. Since there was no way to deal with this area and be consistent with the basic structure of the model, these observations were dropped from the analysis.

For estimation purposes, several adjustments were made to basic flat rate and measured rate access charges. First, in many exchanges, in addition to basic service charges, some households paid line mileage charges. These are added charges for households located more than a specified distance from the center of these exchanges. Average line mileage charges were added to basic service charges in calculating average monthly service charges. Second, we also added to the basic service charge an allowance for a basic phone and the inside wire where these are billed separately. While the customer does not have to lease such equipment from Bell, some expenditures for a telephone and inside wiring must be made to subscribe to telephone service and so these are part of access costs. Third, monthly service charges (including set, wire and line mileage charges) were increased to reflect the cost of all applicable state and local taxes.

Definitions of the price variables used in the model are summarized below.

1. Installation Charge--the statewide average charge for connecting a single basic residence access line. This falls somewhere between the minimum charge, where the telephone, wire and jack are already in place, and the maximum charge, where a completely new installation, including the premises visit, is required. Note that charges associated with extensions and any hookups other than the basic main station are not included in this price.

2. Flat Rate Price (Flat Rate Areas)--the monthly charge for one-party flat rate service in areas with no measured rate service available. These charges include the minimum monthly set and wire charges, any applicable line mileage or zone charges and any applicable state and local taxes not included in the basic rate.

3. Flat Rate Price (Measured Rate Areas)--the flat rate as defined above in areas with measured rate service available. These charges include the minimum monthly set and wire charges, any applicable line mileage or zone charges and any applicable state and local taxes not included in the basic rate.

4. Minimum Measured Rate Access Price--the basic monthly price for the residential one-party measured rate service which is the lowest cost

measured rate option for making 30 calls. A measured rate service is defined as a service in which there is a charge for calls in excess of the local calling allowance. In areas where only two-party measured rate service is available, the two-party access price was used. As with flat rates, these charges include the minimum monthly set and wire charges, any applicable line mileage or zone charges and any applicable state and local taxes not included in the basic rate.

5. Measured Rate Calling Price--the price per local call for any calls made in excess of the calling allowance. In areas with untimed measured rates (sometimes called message rates), this is simply the price of a single call as stated in the tariff. In areas with timed and/or distance sensitive measured rates, the price per call is an average price for local calls computed based on a distribution of calls by time and distance.

6. Measured Rate Availability--this value is "1" in areas where measured rates are available to all consumers and "0" if measured rate service is not available. If measured rate service is available to some but not all subscribers, this variable measures the percentage of subscribers for whom measured rate service is available.

4.3 Economic and Demographic Variables

In this subsection, we have provided a detailed definition for each of the household characteristics used in the analysis. Before describing each of these variables in detail, however, some general comments on the choice of the variables seem in order. In selecting the economic and demographic variables, we focused on variables which experience or theory suggests should be related to demand for telephone service. These include variables which are related to the ability to pay for telephone service (income and employment status, for example), to the householder's need for a telephone as a means of security (age and sex of the householder) and to the household's demand for communication service in general (education and ability to speak English). In addition, some variables, such as race and region, were included only because past studies had suggested that these variables were significant. There is no good theoretical reason for their inclusion and they are undoubtedly proxies for other behavioral measures which are not included in the model. On the other hand, there do appear to be statistically significant differences in demand for telephone service by race and region and it would be misleading to ignore these differences even though we have no explanation for them. While in general all the demographic variables in the model are entered in the linear additive fashion, the current model includes income squared and the product of income and age. This reflects the result of experimenting with a number of alternative interaction terms. We also examined possible interactions between age and price and income and price, but these did not appear to be statistically significant.

The precise definition for each of the household characteristics is summarized below. (For more information regarding the following demographic variables, see the Glossary from the 1980 Census of Population and Housing, User's Guide, Part B. This information is also included in the technical documentation of the public use microdata samples produced by the Census Bureau and in its technical documentation for the summary tape files.)

1. Income--household income (in $1,000) in 1979. Household income includes the total money income received by all household members 15 years old and over. Household income differs from family income in that it includes income from all household members, not just those related to the householder.

2. Age--the age of the householder in years. (The term "householder" was formerly known as "household head.")

3. Education--the highest grade completed by the householder (measured in years). Someone with an elementary school education has eight years of schooling, someone completing high school has 12 and someone completing college has 16.

4. Employment--employment status of the householder is "1" if the householder is employed and "0" if the householder is not employed. Note that many householders who are not employed are also not unemployed, but out of the labor force.

5. Black--"1," if the householder is black and "0" otherwise.

6. Persons Per Household--the number of persons living in the housing unit.

7. Proportion of Household Less Than Six--the number of persons in the household who are less than six years old divided by the total number of persons in the household.

8. Proportion Between Six and Twelve--the number of persons in the household between six and twelve divided by the total number of persons in the household.

9. Proportion Over Sixty-Five--the number of persons in the household (other than the householder) over 65 divided by the total number of persons in the household.

10. Nonfarm Household--is "1" if the household is on a city or suburban lot or a place of less than one acre, and "0" otherwise.

11. South--this variable is "1" if an individual lives in one of the following states: Alabama, Arkansas, Delaware, Florida, Georgia, Kentucky,

Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Texas, Tennessee, Virginia and West Virginia. For individuals in other states, this variable is "0."

12. Other Language--is "1" if persons in the household speak a language other than English at home and a "0" if only English is spoken in the home.

13. Speaks English Poorly--is "1" if a language other than English is spoken in the home and the householder speaks English poorly or not at all. This variable is "0" if the household speaks English well or very well, although English is not spoken in the home, or if the household does not speak a language other than English in the home.

14-18. Household Type--the model allows for five different household types. There are three types of family households, all of which include two or more people in the household who are related to each other, and two types of nonfamily households consisting of unrelated people living in the same housing unit or individuals living alone.

14. Family Household, No Wife--is "1" for family households with no wife present, "0" otherwise.

15. Family Household, No Husband--is "1" for a family household with no husband present and "0" otherwise.

16. Husband/Wife Household--this is the reference group for the family type variable and is not explicitly included in the equation. Such a household would be indicated by setting all of the other family type variables to "0".

17. Nonfamily Household, Male--is "1" for a household consisting of a single male individual or a nonfamily household with a male householder.

18. Nonfamily Household, Female--is "1" for a household consisting of a single female individual or a nonfamily household with a female householder and "0" otherwise.

4.4 Area Variables

In addition to the rate and demographic variables described above, we also included two measures designed to reflect the characteristics of the local calling area in which a household lived. The variables used to describe the calling area included the number of main lines in each calling area and the number of main lines per square mile. Both of these are intended to measure any externality which exists in the demand for telephone service. As was suggested in the body of the report, if there is an externality in demand for telephone service, the demand should be higher in areas where the local calling area contains many subscribers and lower in areas where there are fewer subscribers in the local calling area. Of course, the number of subscribers in the calling area can be large either because the calling area is extensive or because population density in that area is high. Since consumers might be expected to react differently to an extensive local calling area than to a dense local calling area, we included both measures of the total number of subscribers and the density.

The precise definition of the area variables as used in the model are summarized below.

1-4. Phone Density--the number of access lines per square mile in the local calling area of the individual. There are five different phone densities--1-100, 101-1000, 1001-2500, 2501-5000, and > 5000. When phone density is in one of these ranges, the associated variable is equal to "1" and the other density variables are set equal to "0". The density range 101 to 1000 phones is the reference group and is not explicitly included in the demand equation. This density is indicated by setting all of the other explicitly included indicators to "0".

6. Number of Subscribers--the number of subscribers as measured by the number of residential and business access lines in thousands in the local calling area.

4.5 Estimation Methods

The parameters of the logit model were estimated using a maximum likelihood technique specifically designed to estimate parameters of a logit function. This technique is available as part of the SAS statistical package, and is referred to as LOGIST. The maximum likelihood estimation approach provides parameter estimates which are consistent and asymptotically efficient. Given the very large size of the samples used to derive these estimates, the parameter estimates may be assumed to be normally distributed.

The demand model developed in the course of this analysis can be used to predict the probability of telephone subscription for an individual household. In order to make predictions of telephone penetration for a service territory or for a state, the most precise approach is to draw a random sample of the households in that service territory, use the model to forecast probability of telephone subscription for each household, sum the probabilities across the sample, and divide by the number of households. This overall probability represents the predicted proportion of households in the service territory which will subscribe to telephone service.

In deriving the predictions of 1980 telephone penetration by state, and for each of the seven income groups evaluated in Section 3.3, we forecast probabilities for samples of individual households and summed these individual probabilities. The samples used for this purpose were drawn from the 1/1000 sample of U.S. households for which we had price data.

This approach, however, was not used in predicting the effect on penetration rates of alternative price levels or changes in other characteristics. For these purposes, we used the following approach. First, we forecast the log of the odds of subscription to telephone service for each individual in the 1/1000 sample. Second, we determined the mean and standard deviation of the predicted logit for the sample, holding prices constant at their average value in 1980. (The standard deviation of the predicted logit measures the variation in this variable attributable to household and area characteristics.) Third, we used the demand equation to forecast the mean value of the logit for each alternative price level. In making this forecast of the mean logit, we used the average values in 1980 for each of the economic and demographic variables, but substituted for 1980 prices the prices at which we wished to predict penetration. Fourth, the new mean and the estimates of the standard deviation of the logit from Step 2 were used to determine the distribution of the logit value across the population. Fifth, from this distribution we then calculated penetration rates for 20 subgroups of the population and by averaging these penetration rates, obtained the estimated penetration rate for the population as a whole.

In order to test the accuracy of this approach, we used it to forecast penetration for the U.S. as a whole at prices prevailing in 1980 and also to forecast penetration for each of the 48 states. The approach generally works as well as forecasting based upon a sample of individual observations, but there are small deviations reflecting the fact that the logit is not exactly normally distributed. To correct for these deviations, the intercept term of the logit model was adjusted to assure precise predictions of observed penetration in 1980.

5.0 OTHER ACCESS DEMAND MODELS

In addition to the NERA access demand model, which is the basic output of this study, we estimated a number of other access demand models, which may be of some interest. These include separate models for flat and measured rate areas and, for flat rate areas, a model which measures the separate effects of varying one- and two-party flat rate service. The parameters of these models are summarized in Figures 25 and 26. The basic flat rate model gives results which are very similar to those derived from the composite model. For the measured rate model, which applies only to areas which offer measured rate service to all households, the results are also similar to those of the composite model, except that the effect of measured rate access price is somewhat lower and the effect of the flat rate price is somewhat higher than was the case in the composite area. Moreover, for this sample of measured rate areas, the measured rate access and calling price effects are less statistically significant than they are in the composite model. This may reflect the fact that the measured rate estimates are based upon a significantly smaller sample and take no account of areas which offer measured rate service to subscribers in only part of the area. On balance we feel that the composite model provides a more reliable estimate.

We also examined a model which only covers flat rate areas but includes a variable which measures the difference between price of one-party and two-party service in each area. This variable, which is referred to as the two-party discount, enables us to examine separately the effect of raising the rates for one- and two-party service. The model suggests that raising rates for one-party service only has an effect which is about 20 percent of that for raising the price of both one- and two-party service. While the effects seem both

Figure 25

PRELIMINARY 1983 FLAT RATE AREA AND TWO-PARTY DISCOUNT MODELS: PARAMETERS AND MEAN VALUES OF VARIABLES

	Units (1)	1980 Mean Values[1] (2)	Preliminary Flat Rate Area Model Coefficient[2] (3)	Preliminary Flat Rate Area Model t-Statistic[3] (4)	Preliminary Two-Party Discount Model Coefficient[2] (5)	Preliminary Two-Party Discount Model t-Statistic[3] (6)
Intercept			-2.3365	9.53	-2.1983	7.42
Price Variables						
Flat Rate Price (Flat Rate Area Only)	Dollars	8.988	-0.0473	3.59	-0.0595	3.73
Flat Rate Price (Measured Rate Area)	Dollars	-	-	-	-	-
Two-Party Discount	Dollars	1.884	-	-	0.0410	0.67
Measured Rate Access Price	Dollars	-	-	-	-	-
Measured Rate Calling Price	Dollars	-	-	-	-	-
Installation Price	Dollars	30.262	0.0006	0.16	0.0020	0.50
Proportion with Measured Rate Service	Decimal	-	-	-	-	-
Household Characteristics						
Household Income	$1,000	17.856	0.1222	11.58	0.1228	11.62
Household Income Squared	$1,000,000	505.276	-0.0010	6.76	-0.0010	6.72
Age of Householder	Years	47.839	0.0456	17.39	0.0520	5.49
Age Squared	Years	2,611.370	-	-	-0.0001	0.72
Income*Age	$1,000-Years	819.354	-0.0002	0.77	-0.0002	0.91
Education of Householder	Years	11.580	0.1571	18.49	0.1562	18.37
Race of Householder	Indicator[4]	0.099	-0.5048	7.35	-0.5218	7.56
Employment Status	Indicator[5]	0.675	0.3755	5.93	0.3707	5.78
Persons in Household	Number	2.788	-0.0514	2.28	-0.0448	1.68
Proportion Less Than 6	Decimal	0.074	-0.6971	3.95	-0.7436	3.62
Proportion 6-12	Decimal	0.062	0.4513	2.03	0.3912	1.65
Proportion 13-17	Decimal	0.059	-	-	-0.1629	0.67
Proportion 65+	Decimal	0.045	1.2344	4.49	1.2394	4.41
Language Other Than English Spoken	Indicator	0.074	-0.3963	4.22	-0.3918	4.17
English Spoken Poorly or Not at All	Indicator	0.012	-0.2328	1.29	-0.2128	1.19
Family Household, No Wife Present	Indicator	0.022	-0.9193	7.16	-0.9164	7.10
Family Household, No Husband Present	Indicator	0.947	0.2095	2.45	0.2218	2.49
Nonfamily Household, Male Householder	Indicator	0.928	-1.2146	14.61	-1.2239	14.59
Nonfamily Household, Female Householder	Indicator	0.145	0.3077	3.07	0.3068	3.04
Nonfarm	Indicator	0.743	0.1610	2.84	0.1584	2.79
South	Indicator	0.546	-0.4186	6.25	-0.4633	7.06
Local Calling Area Characteristics						
Phone Density 1 (1-100)	Indicator[6]	-	-	-	-	-
Phone Density 2 (101-500)	Indicator[6]	0.339	0.1231	1.47	-	-
Phone Density 3 (501-1,000)	Indicator[6]	0.031	0.4495	2.33	-	-
Phone Density 4 (1,001-2,500)	Indicator[6]	0.001	0.5342	0.51	-	-
Phone Density 5 (2,501-5,000)	Indicator[6]	-	-	-	-	-
Phone Density 6 (5,001+)	Indicator[6]	-	-	-	-	-
Number of Subscribers in Local Calling Area (In Natural Logs)	ln-1,000	3.517	0.1093	3.75	-	-
Number of Subscribers in Local Calling Area	1,000	90.522	-	-	0.0035	7.24
Number of Subscribers in Local Calling Area Squared	1,000,000	33,983.800	-	-	-0.000003	5.33
Number of Observations			25,491		25,491	
R^2				0.120		0.120

[1] The mean values are the means for the sample used to estimate this equation, i.e., for the 25,491 households for which rate data were available.

[2] Coefficients measure the change in the natural log of the odds of a household having a phone for a 1 unit change in the variable.

[3] The t-statistic is the ratio of the coefficient to its standard error. Since parameter estimates are normally distributed, these t-statistics can be used to test hypotheses about the true value of each coefficient.

[4] Race = 1 if the householder is black, and 0 otherwise.

[5] Employment = 0 if the householder is unemployed or not in the labor force and 1 otherwise.

[6] The ranges for the phone density indicators are in numbers of mains per square mile. The range 1-100 phones per square mile is the reference group.

Figure 26

PRELIMINARY 1983 MEASURED RATE AREA MODEL: PARAMETERS AND MEAN VALUES OF VARIABLES

	Units (1)	1980 Mean Values[1] (2)	Coefficient[2] (3)	t-Statistic[3] (4)
Intercept			-2.2203	4.02
Price Variables				
Flat Rate Price (Flat Rate Area Only)	Dollars	-	-	-
Flat Rate Price (Measured Rate Area)	Dollars	10.312	-0.0235	3.02
Measured Rate Access Price	Dollars	6.007	-0.0262	1.07
Measured Rate Calling Price	Dollars	0.094	-1.1396	1.02
Installation Price	Dollars	26.798	-0.0221	3.01
Proportion With Measured Rate Service	Decimal	-	-	-
Household Characteristics				
Household Income	$1,000	21.441	0.1421	13.23
Household Income Squared	$1,000,000	698.661	-0.0011	7.61
Age of Householder	Years	46.650	0.0452	14.95
Income* Age	$1,000-Years	980.819	-0.0006	2.75
Education of Householder	Years	12.326	0.1388	13.96
Race of Householder	Indicator[4]	0.129	-0.5452	7.01
Employment Status	Indicator[5]	0.710	0.3738	5.08
Persons in Household	Number	2.761	-0.0752	2.71
Proportion Less Than 6	Decimal	0.068	-0.8935	4.30
Proportion 6-12	Decimal	0.061	0.5642	2.14
Proportion 65+	Decimal	0.039	1.7829	4.10
Language Other Than English Spoken	Indicator	0.121	-0.3933	4.27
English Spoken Poorly Or Not At All	Indicator	0.022	-0.0801	0.51
Family Household, No Wife Present	Indicator	0.026	-0.9087	6.02
Family Household, No Husband Present	Indicator	0.111	0.0599	0.61
Nonfamily Household, Male Householder	Indicator	0.114	-1.2452	12.25
Nonfamily Household, Female Householder	Indicator	0.157	-0.0028	0.02
Nonfarm	Indicator	0.884	-0.1267	1.27
South	Indicator	0.240	-0.3440	4.55
Local Area Area Characteristics				
Phone Density 1 (1-100)	Indicator[6]	0.144	-0.1514	1.19
Phone Density 4 (1,001-2,500)	Indicator[6]	0.150	0.3334	2.67
Phone Density 5 (2,501-5,000)	Indicator[6]	0.170	-0.3516	3.00
Phone Density 6 (5,001+)	Indicator[6]	0.062	-0.6191	4.84
Number of Subscribers in Local Calling Area (in Natural Logs)	ln-1,000	12.431	.0.1594	4.24
Number of Observations			26,349	
R^2			0.087	

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[1] The mean values are the means for the sample used to estimate this equation, i.e., for the 26,349 households for which rate data were available.

[2] Coefficients measure the change in the natural log of the odds of a household having a telephone for a 1 unit change in the variable.

[3] The t-statistic is the ratio of the coefficient to its standard error. Since parameter estimates are normally distributed, these t-statistics can be used to test hypotheses about the true value of each coefficient.

[4] Race = 1 if the householder is black, and 0 otherwise.

[5] Employment = 0 if the householder is unemployed or not in the labor force and 1 otherwise.

[6] The ranges for the phone density indicators are in numbers of mains per square mile. The range 101-1000 phones per square mile is the reference group.

interesting and plausible, we have chosen not to rely on this model because we were unable to measure the effect of the two-party discount with sufficient reliability.

6.0 SUGGESTIONS FOR FURTHER RESEARCH

As is the case with almost any effort at empirical research, this analysis of telephone demand raises a number of interesting questions which should be the subject of further research in this area. In this section, we try to summarize some important empirical issues which could be explored from the data base developed here, but which were not explored in this study due to time and budget limitations. In making these suggestions, however, we do not intend to limit the use of the current model; the model, in its present form, is quite adequate to answer many policy questions.

The first and perhaps the most important unresolved issue is the effect of toll charges on access demand. Toll charges were not included in this study because we felt the effect of toll charges would be modest and because it appeared that the data collection effort necessary to include toll charges would be too burdensome.

On the basis of the results we have seen to date, particularly the marked increase in telephone penetration over the decade of the 1970s, a period in which toll rates declined in real terms, it seems plausible that toll prices do have a significant effect on access demand. Although a complete analysis of this effect would require more data, a preliminary assessment could be made by relating access demand to the prevailing level of intrastate toll prices in each state. If this result proved promising, additional analysis could be undertaken to measure toll effects more precisely.

The second key issue is the specification of prices for flat and measured rate service. The current model assumes that access demand is a function of the prices of two specific rate options--flat rate service and a minimum price measured rate service. The specification, however, does not permit us to include areas which do not offer flat rate service and is also incomplete where more than one measured rate service is offered. The model might well be improved by expressing access demand as a function of the minimum price of access and costs necessary to make various levels of added calls. In exclusively flat rate areas, the minimum price would be the flat rate charge and the cost of additional calls would be zero. In areas offering measured rate service, the minimum access price would reflect the lowest access cost for measured rate service and the prices of additional calls would reflect either the amount necessary to make additional calls under this measured rate option, or the cost of switching to other measured rate options, or the incremental price necessary to switch from measured flat rate service, whichever was cheapest. Costs for several discrete calling intervals would be evaluated to take account of the non-linear relationship between calling volume and cost. This approach might enable us to represent more accurately a wider range of possible price structures than those represented in this study.

Third, it would be useful to expand the model to include the price of multi-party service. Although we have developed one model which describes the effect of a multi-party service, we did not obtain statistically significant effects. It might be possible to estimate these effects more reliably by analyzing the effect of two-party service in the full sample. In addition, the reliability of the estimates might be improved if we could distinguish between two-party rates available to all and those which have been grandfathered.

A fourth important consideration is the specification of the functional relationship between access prices and penetration. The model assumes that the absolute value of the access price is linearly related to the log of the odds of telephone subscription. It might also be argued that the log of access price is linearly related to the log of the odds of telephone subscription. Such a model would imply somewhat different (smaller) effects for large absolute price increases. Since this alternative form is important from a policy point of view, it should be tested and its results compared with the linear model explored here.

A fifth issue, which needs to be explored more fully, is the effect of income and other demographic variables on access demand. In the model it is assumed that only income in the year preceding the Census survey influences demand for telephone service. In fact, demand for service is more likely to be related to long term or permanent income. This suggests the usefulness of an instrumental variables approach in which income is first related to a large number of other economic and demographic household characteristics and the "predicted income" derived from this equation is used as a proxy for permanent income. This estimate of permanent income, as well as the deviations between 1979 income and permanent income, would probably represent more appropriate determinants of demand than those used in the existing model. We have experimented with this approach in a preliminary way and the results are sufficiently promising to support further research in this area.

Sixth, as we pointed out earlier in the text, there do appear to be some systematic differences in access demand by region. These may result from differences in climate, the ethnic make-up of these regions or, possibly, company policies not reflected in rates. It would be quite useful to explore the determinants of these regional differences, either by estimating separate regional telephone demand models or by adding additional variables which reflect the characteristics in regions.

Seventh, it would be very useful to examine the time pattern of the effect of prices on access demand. This could be done, in the context of the current model, by including prices for previous years as determinants of 1980 access demand.

Finally, one suggestion for additional research suggested by this study goes beyond the improvement in the access demand model itself. Establishing future pricing policy requires estimates of the effect of prices on class of service choice and local usage value for individuals selecting particular classes of service. The data base developed in the course of this study, which provides price data for each of 7,260 Bell telephone exchanges across the United States, in conjunction with data already available, would permit us to develop cross-section analyses of both class of service choice and local usage.

7.0 CONCLUSION

We believe that this report provides a comprehensive assessment of the effect of local service prices on demand for telephone service. While we have tried to describe these effects, we have tried not to characterize them. Some readers will conclude that these effects are trivial, while others will view them with genuine concern. Depending on the price changes contemplated and the economic and demographic characteristics of the area considered, either view may be appropriate.

Whichever view one takes, however, the results of this study should provide a basis for developing rational pricing policies. For readers who view the effects of price on telephone demand as "de minimus," the results should provide the basis for supporting moves toward cost-based pricing.

However, for readers who feel that cost-based pricing will have unacceptable effects on demand, the study suggests that the provision of life line rates to low income consumers can mitigate the effects of cost-based pricing while assuring that most consumers pay the full cost of telephone service.

Appendix H.--Testimony Submitted to the Subcommittee on Energy, Environment and Safety Issues Affecting Small Business on Impact of Charges in Telecommunications Industry on Small Business

Before The

CONGRESS OF THE UNITED STATES

HOUSE OF REPRESENTATIVES

Small Business Subcommittee on Energy,
Environment and Safety Issues
Affecting Small Business

Field Hearing
Abilene, Texas
July 11, 1984

Testimony of
JOE B. GIBSON
President,
United Telephone Company of Texas

Mr. Chairman and members of the Subcommittee, I am Joe B. Gibson, President of the United Telephone Company of Texas, headquartered in Tyler, Texas. I am also on the Board of Directors of the Texas Telephone Association and the Texas Exchange Carriers Association, but my remarks today represent the views of United Telephone Company of Texas only. My company shares the Subcommittee's concern about the need to preserve universal telephone service in this country. We believe, however, that full implementation of the FCC's Access Charge Plan, as presently constituted, is the best method to enable telephone companies to continue to provide service at reasonable rates.

My company, the United Telephone Company of Texas, and its subsidiary the Palo Pinto Telephone Company provides local exchange telephone service and other ancillary services to the local exchange and is one of 72 companies in Texas who jointly provide intraLATA long distance services. United of Texas is one of the smallest of nine operating groups of telephone companies which compromise what is known as the United Telephone System, operating in 20 states. At year-end '83, United Telephone Company of Texas served 95,054 access lines in over 90 communities, with over 194 million dollars invested in property, plant and equipment, and 845 employees. Total 1983 revenues were 72.9 million dollars.

While we are considered to be the fourth largest local exchange telephone company in Texas, we are dwarfed in size by the two largest companies. Apart from the Bell company there are 71 so called Independents which serve approximately 55% of the geography of Texas. Our company serves 7,830 square miles of territory which gives us a density of approximately 12 customers per square mile. Most of our exchanges are quite small and are comparable to some of the smallest companies in the state.

Before I address specific issues, I think it would be useful to briefly review the economic circumstances that underlie the FCC's end user charge policy.

TELEPHONE NETWORK COSTS AND SEPARATION PROCEDURES

I'd like to begin with the economic characteristics of the telephone network. The basic components of that network, as illustrated in Exhibit A, are:

(1) Customer Premise Equipment (CPE) including the telephone set itself as well as the intra premises or "inside" wiring;

(2) The local loop, or wire, that connects the customer with the local switch;

(3) The local central office, or switch, which performs the basic function of setting up the connection between the called and calling party; and

(4) The long distance network.

The costs characteristics of the telephone network are not homogeneous. CPE, the local loop, and even a portion of the local central office, are facilities dedicated to the use of individual subscribers. The cost of these facilities are independent of how much they are actually used by the customers. To take a simple example, the costs of a basic telephone set is the same whether the customer uses it 24 hours a day or not at all. Because the costs of these facilities are not affected by usage, they are referred to as non-traffic sensitive, or NTS, plant.

The costs of other components of the network, on the other hand, are affected by usage. For example, the capacity, hence the costs, of the local switch and long distance network are a direct function of the customers' calling volumes. Because the costs of these components of network are primarily determined by usage levels, they are referred to as traffic-sensitive plant.

With that background, let's now turn to the separate but related matter of how these costs, and particularly NTS costs, have been recovered from users of telephone services.

Central to this issue are what are referred to as jurisdictional separation procedures. Under our dual system of regulation of the telephone industry, the FCC is responsible for regulating interstate toll service, and the respective state regulatory bodies are responsible for regulating local exchange and intrastate toll services.

Consequently, it has been necessary to allocate or "separate" the costs of the telephone network between the state and federal jurisdictions in order to determine the appropriate level of rates to be charged for state and interstate services. Jurisdictional separations procedures are the cost allocation methodologies that have been developed to accomplish this essential legal function.

At least in principal, the separation of traffic-sensitive plant is relatively straightforward. Because of the costs of this plant are a direct function of usage, it makes economic sense to allocate the costs of this plant between the state and federal jurisdictions on the basis of the relative use by state and interstate services.

The allocation of NTS costs, however, is another matter. As was stated by the US Court of Appeals for the District of Columbia Circuit, in its June 12, 1984 Opinion in NARUC vs. FCC, case number 83-1225 (pgs. 19-20), "(p) plant costs are non-traffic sensitive when they do not vary with the extent to which the facilities are used. The basic cost of installing and maintaining a local loop, for example, remains the same whether the subscriber, or 'end user', uses a loop to make one call or one hundred, and whether those calls are local or long-distance. Some switching costs, on the other hand, are traffic-sensitive. They in fact increase with usage; for example, as more calls pass through the equipment, heavier, or more costly switches must be employed."

Prior to 1943, this essentially economic view of telephone network costs was reflected in separations procedures. Under what was called the "board to board" principle, only the interstate share of long distance facilities (i.e., from toll board to toll board) was allocated to, and recovered from, interstate toll services. Because NTS costs were not affected by toll usage, those costs were recovered directly from customers through local service charges.

In 1943, however, the FCC adopted what is called the "station-to-station" principle of separations. This principle holds that since interstate services, in a literal sense, "use" the NTS plant of the network, they should be required to help defray the costs of those facilities. Consequently, separations procedures were revised to allocate a portion of NTS costs, including the costs of telephone sets or "stations" as well as the local loop to the interstate jurisdiction.

Since then, the method of allocating NTS costs between the state and interstate jurisdictions has been subject to frequent revision, the effect of which has been to allocate an ever greater proportion of those NTS costs to the interstate services. Under the existing SPF (subscriber plant factor) formula, a nation wide average of 26%, or approximately 11 billion dollars, of the total NTS costs of the network are allocated to and recovered from the interstate toll services. These allocated NTS costs constitute almost 40% of AT&T's total revenue requirements of MTS and WATS services, prior to the implementation of access charges.

THE FCC'S END USER CHARGE DECISION

The existing separations procedure are largely the product of an era of regulated monopoly. With the advent of competition in the interstate long distance market over the past decade, however, the economic fallacy of recovering NTS costs from the interstate toll services revenues has become increasingly apparent.

To place the issue in a more concrete perspective, lets examine the effect of the existing separations procedure at an individual customer level. The average monthly cost of a local loop today is approximately

$26. Prior to the implementation of access charges, the NTS costs allocated to the interstate toll services amounted to an average of about 15¢ per each minute of use.

This arrangement is obviously beneficial for customers making no interstate toll calls, who thereby enjoy a local service for a total price that is some $7 dollars lower because of the contribution being made by the interstate services. However, to the extent the customers do make interstate toll calls, the benefit of the toll contribution to local rates is to varying degrees offset by higher toll rates. For instance, a customer who makes 30 minutes of interstate toll calls will be contributing to the toll charges, $4.50 to cover the NTS cost allocated to interstate toll services, therefore negating most of the $7 reduction in his/her local rates.

Simply put the effect of existing separations procedure is to redistribute part of the cost of local loops among subscribers in a manner proportionate to toll usage. If all subscribers use exactly the same amount of interstate toll usage, the net impact of this practice would be nil. That is, each customer would be contributing, through interstate toll rates, an amount exactly equal to the reduction of local rates made possible by the toll contribution to NTS. (Even then, it should be noted, that the allocation of NTS costs to interstate toll service has the perverse economic effect of overcharging for toll calls and thereby artificially discouraging usage of the toll network.)

In fact, however, a large proportion of interstate calling is accounted for by a very small proportion of telephone service subscribers. To take a fairly typical example, one Bell Operating Company (BOC) reports that 1% of its business customers account for 42%

of its total business MTS revenues, and 10% account for 75% of those revenues.

Thus, the effect of allocating NTS cost to the interstate jurisdiction and recovering those costs through toll charges is to require high volume toll users to contribute to, or subsidize the cost of facilities dedicated to the use of other subscribers. To give an example, a customer making 4,000 minutes of interstate toll calls in a month would be contributing about $600 to the recovery of NTS cost, or about 30 times the cost of the local loop used to serve that customer.

In the era of regulated monopoly, high volume users have little choice; they either paid the going rate, or they didn't use the service. In today's environment, however, competition is providing these customers with an increasing variety of options by which they can "bypass" the local switched network and avoid the subsidy built into the charges for using that network to originate and terminate long distance calls.

The consequences of attempting to maintain the practice of extracting an NTS contribution from toll services, then, is twofold. First, it provides an artificial or uneconomic incentive for large volume users to bypass the network. That is, those customers will be induced to utilize facilities that are less expensive relative to exchange carriers' tariff rates but more expensive relative to the exchange carriers' underlying costs.

Second, absent stringent regulatory controls over bypass, exchange carriers would be confronted with loss of those customers who currently provide a substantial portion of the NTS contribution. Simply put, Local Exchange Carriers will not be able to require high volume toll users to subsidize other customers in a competitive market place.

The FCC's Access Charge Plan was a direct and rational response to the threat of uneconomic bypass. Essentially what the FCC's end user charge plan does is to require that NTS costs be recovered from the causer of those costs - the end user. Not only does this change in the method of NTS cost recovery forestall the threat of uneconomic bypass, but it also moves the industry towards cost-base pricing - a necessary step for the long term viability of local exchange carriers in an increasingly competitive environment.

What is somewhat confusing about the FCC's end user charge plan is that the Commission elected not to alter the proportion of NTS cost allocated to the interstate jurisdiction. However, the fact that NTS costs will continue to be allocated to the interstate jurisdiction and will be recovered through interstate end user charges is largely a matter of form and not substance. From a purely economic perspective, what the FCC's plan does is to simply require that the cost of NTS facilities be born directly by the individual subscribers to whose use those facilities are dedicated.

THE EFFECT OF END USER CHARGES ON SMALL BUSINESS TELEPHONE RATES

The FCC's end users charge plan has elicited considerable concern about the impact of those charges on the small business users. Indeed, the Small Business Telephone Task Force was created to address precisely those concerns.

In responding to those concerns, I would first like to reiterate an essential point. The end user access charge has nothing to do, and should have nothing to do, with whether, or how much, an individual customer uses interstate toll services. From an economic perspective, the end user charge is simply a reflection of the fact that NTS costs are caused not by toll usage but by the individual customer's, or end user's, decision to subscribe to telephone service, and therefore should properly be born by that customer.

Thus the FCC's end user charge plan requires small business users, like all other users, to do nothing more than to cover the cost of those local exchange facilities provided for their use.

While I appreciate the Subcommittees concern with the impact of end user charges on small business, I believe that concern is not warranted; and that, indeed, the potential impact on this class of subscriber has been grossly exaggerated.

For example, in the territory served by United Telephone Company of Texas there are 2,032 Key System accounts. The profile of these customers is shown in Exhibit B. The average account has 2.4 lines and generates $176 per month for normal long distance calling (message toll service, or MTS), $111 per month for line, equipment and network services, and $22 per month for directory advertising. The average customer, then, generates approximately $310 of revenue per month for the UTT company. Actually, this is conservative because revenues from WATS calling are not included. Based on the revenues just described, these customers account for approximately 44% of the MTS revenues from the business sector.

The profile I have just described compares closely with that described in the recent National Federation of Independent Business petition to the FCC for further reconsideration of end user charges. In that petition, the NFIB deals with the illustrative 2 to 3 line subscriber whose total monthly bill falls between $200 and $500 dollars per month with approximately 25% of that amount going for long distance calling. Additionally, 55% of its members have annual gross receipts of $200,000 or more.

Returning to the typical UTT small business subscriber, the increasing result from the weighted average UTT multiline business end user charge of $4.20 is about $10 per month. This amounts to less than $121 per year. That increase is mitigated by two factors. One is the recent 6.1% reduction in the interstate long distance rates, which could increase as more of the FCC Access Charge Plan (particularly, residential end user charges) is implemented. The other mitigating factor is the customer's marginal tax bracket. Thus it is possible that the customer would feel no effect at all, or even experience a net decrease in his/her bill if he/she is a heavy interstate user. On the other hand, the cash flow impact upon his/her business will almost certainly be less than $100 per year.

I do not believe that this effect portends financial hardship for the small business sector of the economy. Thus, I urge the Subcommittee not to take any action that would reduce or eliminate the end user charges currently in effect. They are essential for the telephone industry to move from a regulated monopoly environment to a cost-based, competitive arena.

BYPASS

I must emphasize that the alternative to pricing telephone service so as to more closely recover the cost from the cost causer is bypass. In the words of the FCC, "bypass is an actual threat and present danger." (Third Report and Order, released February 28, 1983, in Docket Number 78-72, Phase I, paragraph 107.) The US Court of Appeals for the District of Columbia Circuit recently held that "...the FCC's treatment of the bypass issue is adequately reasoned..." (Opinion, dated June 12, 1984, in NARUC vs. FCC, Case No. 83-1225, pg. 45).

As that same court noted, Western Union, for example, already has a growing investment of over $100 million in local distribution facilities as part of a specific program to reduce its dependency on the Bell system (pg. 45-47). Some parties have suggested that the problem can be cured by denying potential bypassers permission to construct facilities; but, both the FCC and the Court (pg. 47) rejected this proposal as unsound and unworkable. To the extent that access charges are set at excessive levels, there can be little doubt that interstate users will be encouraged to invest in unnecessary and duplicative facilities. The Court concluded that "...FCC sufficiently established the existence of bypass as a real market force." (pg. 49)

Moreover, once begun, the debilitating effects of bypass will spread. The nature of bypass is that it produces a vicious spiral-effect; that is, the more customers that drop of the network, the more costs that are left for the remaining customers to bear, which will cause higher rates that will force more customers to cancel service, and so on. In other words, all customers need to understand, appreciate and accept the prospect of comparatively moderate increases in telephone rates to cover today's costs of service, in order to avoid virtually prohibitive increases that will surely result in the future if arbitrary and uneconomic incentives to bypass are continued. Otherwise, the telephone industry faces escalating earnings deficiencies, which in private business always eventually leads to financial ruin.

More importantly, it must be recognized that in the environment of interstate access charges, the impact of bypass is not limited to just those telephone companies which have large customers that leave the local network for alternative communication routes. The interstate Carrier Common Line Charge is calculated, essentially, by dividing the allocated non-traffic sensitive access costs by the forecasted minutes of use. If an exchange carrier is subsequently bypassed, it will obviously not experience or charge for the minutes of use it had expected. Thus, that carrier will pay into the Carrier Common Line Pool less revenues than were anticipated for the year. So long as participation in the interstate Carrier Common Line Pool, administered by the National Exchange Carriers Association, is mandatory for all exchange carriers (under the FCC's Access Charge Plan), all such exchange carriers will effectively be precluded from recovering from the Pool the full authorized rate of return.

Further, since such a result will cause exchange carriers to report higher costs to the NECA in subsequent years, thereby driving the Carrier Common Line Charge higher, more bypass will be stimulated and the opportunity for the Pool to earn the authorized rate of return will be increasingly diminished. In other words, the vicious spiral-effect of bypass can and will eventually adversely impact all exchange carriers.

Even the U.S. Congress has recognized the evil of bypass. A study entitled "The Economic Issues of Changing Telecommunications Industry" was issued by the Joint Economic Committee, to the Congress of the United States, on October 3, 1983. The study written by staff economist Dale Jahr, succinctly states that; "Universal service is jeopardized by both (customer) dropout and bypass, but bypass is the largest threat to the economic feasibility of the public phone network..." "This applies to all areas of the country high cost and low cost alike" (pg. 16-17).

Mr. Jahr has subsequently addressed these same principles in a Staff Study prepared for the Joint Economic Committee of the Congress, dated March 1, 1984, entitled "Public Policy Considerations of Pricing Telephone Services."

The Congressional Budget Office (CBO), Congress of the United States, also addressed these issues in a June, 1984 study entitled "The Changing Telephone Industry: Access Charges, Universal Service, and Local Rates." As has been widely reported, that study does not support the anti-access charge approach that was contained in Senate Bill 1660 and House Resolution 4102. It concluded that such legislation "...might prove difficult to administer and have unintended consequences for the development of new technologies." (page 13). Instead, the CBO suggested that;

"The Congress might choose to take no action and permit the FCC to implement its access charge program. A 'do nothing' approach could be justified for several reasons. First, changes in telephone rates might be viewed as being similar to price changes for other services. While all price changes tend to benefit some individuals at the expense of others, the government does not normally seek to freeze prices in the attempt to protect individuals who might otherwise suffer. Second, the level of access charges now proposed--limited to $4.00 monthly until 1990--might not be considered to be high enough to cause extreme hardship. Third, the FCC has proposed to establish a Universal Service Fund to assist the subscribers of high-cost companies and is now supporting means to exempting low income subscribers from access charges" (pg. 44).

Finally I must refer to the June 12, 1984 opinion of the US Court of Appeals of the District of Columbia Circuit, in the case of NARUC vs. FCC, No. 83-1225. After an exhaustive analysis of all the arguments against the FCC's Access Charge Plan, the Court affirmed the general principles contained therefore in saying that;

"Over five years' study of complex and far-ranging issues set the foundation for the FCC's orders in this case. The Commission predicted industry trends and the impact of rate changes, reconciled widely diverse policy goals and numerous competing interests, and devise solutions to novel and difficult problems. Confronting rapid and fundamental changes in the telephone industry as a result of competition and fast moving technology, the FCC acted for the most part with flexibility and care. The Commission's work fell short of the ideal at several turns but our review does not and cannot require perfection. (Citation omitted); Voltaire, Dictionnaire Philosophique (Dramatic art) (1794) "Le mieux est l'ennemi du bien" ...The best is the enemy of the good).

"We do not find unreasoned the Commissions' determination that, to the extent practical, telephone prices should be based upon the true cost characteristics of the telephone company plant. (Citation omitted) Nor, with limited exceptions, can we quarrel with the FCC's exercise of judgement in deriving workable formulas, estimating numbers that cannot be mathematically proved, and making equitable assessments of the speed with which changes should be introduced".

"Further refinements to the FCC's plan could be debated endlessly. However, the Commission has reached a point in its deliberations where 'a month of experience will be worth a year of hearings". (Citation omitted) The FCC has not achieved a plan of pristine quality. But in the words of Voltaire: Perfection is attained by slow degrees; it requires the hand of time'. (Citation omitted)

I respectively urge the Subcommittee to heed the wisdom of these words, and not seek by legislation to reverse any part of the FCC's Access Charge Plan now in effect. Thank you very much.

Joe B. Gibson

President
United Telephone Company of Texas
P.O. Box 2016
Tyler, Texas 75710

EXHIBIT A

JOINTLY USED, OR COMMON, TELEPHONE FACILITIES

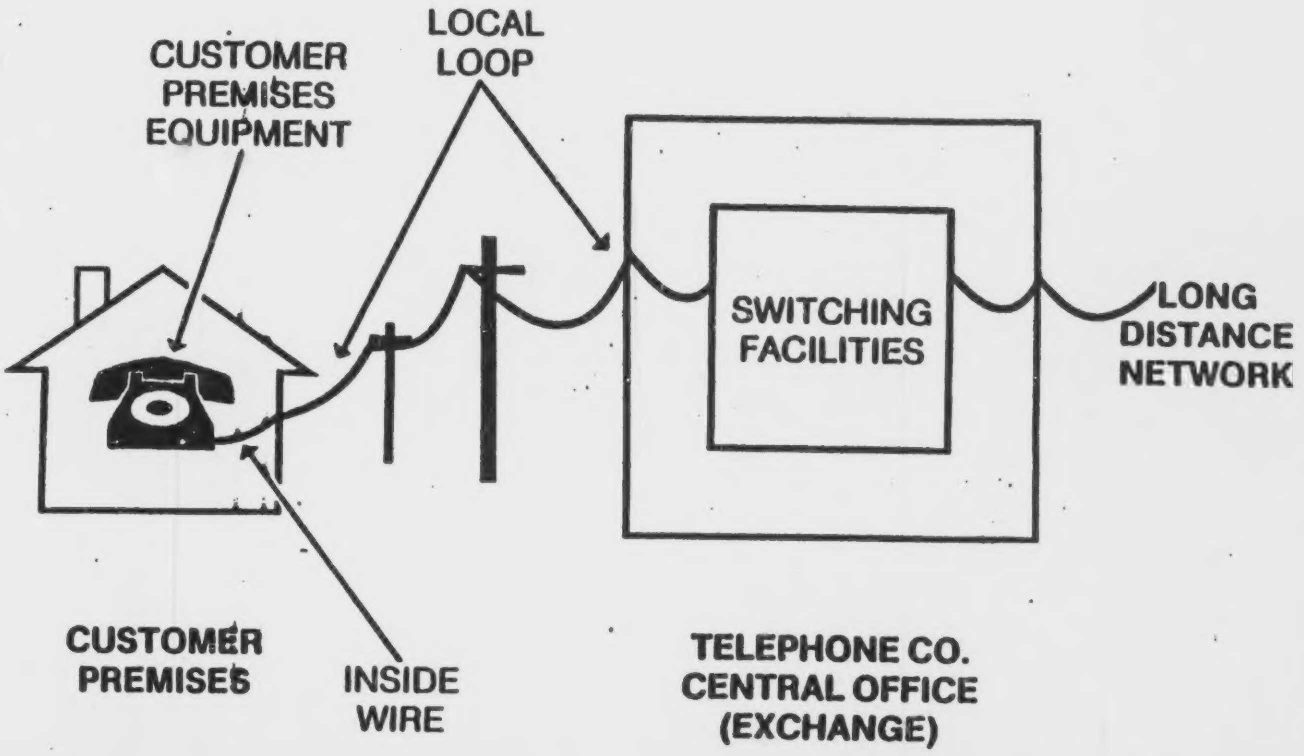
CUSTOMER PREMISES EQUIPMENT
LOCAL LOOP
SWITCHING FACILITIES
LONG DISTANCE NETWORK
CUSTOMER PREMISES
INSIDE WIRE
TELEPHONE CO. CENTRAL OFFICE (EXCHANGE)

Exhibit B

UNITED OF TEXAS, CONSOLIDATED

KEY SYSTEM ACCOUNTS

1.	Accounts	2032
2.	Lines	4875
3.	Lines/Accounts	2.4
4.	Long Distance Revenues/Month	$358,751
5.	Long Distance Revenues/Account	$ 176.55
6.	Recurring Revenues/Month (Lines, Equipment, Network Service)	$227,527
7.	Recurring Revenue/Account	$ 111.97
8.	Directory Advertising Revenues/Month	$ 44,358
9.	Directory Advertising/Account	$ 21.83
10.	Total Revenue/Month	$630,636
11.	Total Revenue/Account/Month	$ 310.35

TESTIMONY OF DERRELL FARMER

I. INTRODUCTION

Good morning, Mr. Chairman and Members of the Committee. My name is Derrell L. Farmer and I am the Manager of Taylor Telephone Cooperative, Inc. in Merkel, Texas and President of the Texas Statewide Telephone Association. Today I also represent the National Telephone Cooperative Association, and TSTCI.

NTCA is a national trade association comprised of approximately 450 locally owned and operated small telephone systems providing service in rural areas in 42 states. Most of these systems have obtained capital financing under the loan programs of the Rural Electrification Administration (REA).

The Texas Statewide Telephone Cooperative,Inc., is an organization consisting of twenty-four member telephone cooperatives serving an approximate 100,000 subscribers in predominatly rural areas and small communities within the State of Texas and the Panhandle of Oklahoma.

These cooperatives were organized to serve the rural areas of the State as the only means for the rural people to receive telephone service. The Bell System and the major independent telephone companies were unable or unwilling to serve these economically unprofitable areas. The areas served by our cooperatives have an average density of only 2.01 main stations per route mile. These range from a low of .58 per mile to a high of 5.46 per mile. This is in comparison with [illegible] for all REA borrowers [illegible] to over 27 main stations per route mile for Southwestern Bell - Texas. The investment per main station ranges from a low of $1,704 to a high of $6,246 with the average being almost twice that of all REA borrowers combined, and almost three times that of the Bell system.

Taylor Telephone serves 5,000 subscribers along 2,208 route miles of cable, which is an average of 2.26 subscribers per mile. We serve parts of nine counties surrounding the Abilene and San Angelo areas. Our service area covers 1,966 square miles. We have a total investment in cables, buildings, and equipment of $12,608,184.00 (twelve million six hundred eight thousand one hundred eighty four)- that equals to $2,521.64 per subscriber. Taylor Telephone's average income from local service is $11.57 per month and $29.32 per month from toll. If they keep eroding income from our toll, you can see what it will do to our local rates.

II. ACCESS CHARGE DECISION

The FCC's "Access Charge Decision", which was last amended in January, 1984, has shifted the cost of toll onto the end-users. The purported goal of this dramatic change in telephone pricing is to keep large business users on the public telephone network and thereby increase economic efficiency. Yet the Commission has admitted it does not have conclusive evidence that large users will not bypass the public network even if end-user access charges are imposed.

The FCC insists that this plan can be carried out without any significant subscriber drop-off. Yet, it has never conducted its own, thorough examination of potential drop-offs; but has instead relied on industry-financed studies.

We in rural America feel the Commission is helping large telephone users at the expense of rural subscribers - both business and residential. There will be subscriber drop-off in rural America because interstate access charges, coupled with local rate increases will make basic telephone service prohibitive. The level of assistance recommended by the Joint Board in Docket 80-286, and which the FCC considers adequate to assist high cost telephone systems is not sufficient. NTCA believes high cost telcos should recover 100% of NTS cost over 110% of the national average. Moreover, the method for calculating a company's cost in order to determine eligibility for high cost assistance under the FCC's plan penalizes telephone systems which are REA borrowers because it lowers their cost relative to those of non-REA borrowers. Under the Joint Board's formula, national non-traffic sensitive (NTS) or fixed plant costs are calculated using a national average costs of debt. For consistency and fairness, we believe the national average cost of debt should be used. NTCA has made these views known in recent comments in on going proceedings in the Access Charge and Joint Board dockets.

The Commission has said the long term benefits of access charges will outweigh its short term hardship on some subscribers. FCC Chairman Fowler has pointed to the 6.1% reduction in long distance rates as an example of such a benefit. Mr. Chairman, our subscribers, like most rural subscribers make mostly intrastate long distance calls, if they make any long distance calls.

If the FCC implements a $2.00 access charge per month for resident subscribers, which is proposed now for June 1, 1985, our subscribers would have to make at least $35.00 Interstate or Interlata per month toll charges to break even - with 6.1% reduction on interstate long distance calls. A very small portion of our subscribers would realize a savings. Of our 5,000 subscribers, they only average $29.33 per month on all long distance calls.

We would recommend that if these charges are due from anyone, let's add them on to the carriers of toll. First of all, these charges are related to interstate jurisdiction controlled by the FCC and the local loop and local subscriber should be controlled by the State Regulators.

In a recent survey conducted by the National Federation of Independent Businesses (NFIB) two-thirds of those responding stated that less than half of their phone bills represented long distance charges. In addition, over half of their long distance calls were intrastate. Clearly, rural businessess, and therefore rural communities will not benefit from long-distance rate reductions. Yet small businesses are paying exhorbitant charges for access to long-distance.

The first end-user charges for multi-line business customers were implemented May 25, 1984. A survey of the charges to Taylor Telephone subscribers prove that rural subscribers are bearing an unfair burden under the FCC's plan.

We have 51 small business subscribers with a total of 149 access lines on our system. The cost of the access charges is $894.00. The reduction of the toll amounted to $359.67. The difference between the rate reduction cost and the charge to 149 access lines is $534.33. This Toll Study shows that due to access charges being added to multi-line subscribers these 149 subscribers paid approximately $3.59 more per line with the addition of access charges less the rate reduction than they would have if no changes had taken place. Of these 51 subscribers only 4 had a savings, and it was very minimal (see Exhibit I).

As you know many states have considered or are considering mirroring the FCC access charge scheme. The Texas Public Utilities Commission however, has strongly opposed end user access charges because it believes they pose a threat to universal service.[1] In its decision the Public Utilities Commission (PUC) recognized that those of us serving high cost, low density areas will be hurt most by the reduction in toll revenues caused by divestiture.

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[1] Texas P.U.C. Docket No. 5113, Proposed Order and Examiner's Report, April 3, 1984, P. 48.

III. OTHER UPWARD PRESSURES

A. Reduced Toll Revenues

Under deregulation, small rural telcos revenues are being diminished. Specifically, separations changes will reduce our revenue from toll business. In addition, we will no longer receive settlements for terminal equipment, since it was deregulated. In large states like Texas, telcos will receive less revenue from the toll pool, since local exchanges would recover for short distance (or short haul) toll, not the more profitable long-distance (long haul) toll. Also, we will no longer recover revenues for station connections.

The impact of these revenue losses is still uncertain. What is certain is that local customers will have to make up the difference.

B. Toll Rate Averaging

All low-density toll routes, such as those in rural areas, benefit from our current national policy of toll rate averaging. Toll rate averaging is a pricing concept whereby a customer pays equally for interstate calls across equal distances, time of day and duration. There are clear indications that a move to deaverage toll rates is imminent.

Toll rate deaveraging would have a dramatic effect on rural toll rates since a rural toll link costs six times as much as an equivalent urban toll route. AT&T has indicated in FCC proceedings on long-term deregulation of AT&T that it would seek deaveraging under certain circumstances. Like airline deregulation, toll rate deaveraging will further isolate rural America.

Rural users throughout the country have local calling areas with fewer telephones to reach than urban users. Consequently, rural users are more dependent on long distance service to reach essential services such as doctors, hospitals, schools, etc.

NTCA believes legislations should address the higher cost of rural toll connecting links. We urge Congress to include in universal service legislation an explicit statement of support for continued averaging of toll rates nationwide. If legislation is adopted to provide for carrier access charges, provisions should be made to protect deaveraging of toll rates in high cost areas.

C. Burdensome Regulation

Under Section 2(b) of Title II of the Communications Act, small exchange telephone companies, as intrastate carriers, are exempt from many of the FCC regulations and reporting requirements. Unless carefully designed, new mechanisms for recovering local costs may impose heavy new reporting and filing requirements on small companies. NTCA also supports the concept of equal interconnection or equal access, as it is known. However, we urge that economically infeasible requirements for such interconnection not be imposed on small companies with electro-mechanical or older switches. As a minimum, implementation schedules should recognize the technical and financial constraints of small companies and allow flexibility in meeting these standards. NTCA urges Congress in considering common carrier legislation to continue the Section 2 (b) (2) exemption for small local telephone companies.

D. Indirect Pressures

Not only are small, rural telephone systems having to respond to major upheavals in the telephone industry, but simultaneously REA, our main source of financial support, is under attack. A bill to strengthen REA telephone and electric loan programs and afford REA borrowers like Taylor Telephone the flexibility to seek non-government funding, H.R. 3050, passed this body easily in March, 1984. A similar measure, S. 1300, is under intense debate in the

Senate at this time. Moreover, this Administration has been a primary opponent of attempts to ensure the solvency of the REA program, a program which is largely responsible for bringing basic telephone service to rural America. In addition, commercial cable companies are capable of competing for wireline telephone service. Under H. R. 4103, which is pending in the House, they would have a competitive advantage in the area of data transmission.

IV. CONCLUSION

Finally, I would like to point out that rural telephone systems like Taylor Telephone are also small businesses and all end-user access charges impact on our business. When subscriber drop-off occurs due to end-user access charges, industry changes and the various pressures which increase rates, our cooperative loses business. This in turn hurts our community because we contribute greatly to the local economy.

Your constituents, on whose behalf I am speaking to you today, are also our customers. Therefore, we ask you to reverse the movement to an access charge system because it is unfair and also because it does not make economic sense to undermine a major contributor to the rural economy - the telephone system.

We appreciate your concern, Mr. Chairman and all the members of the Committee, and your interest in preserving universal telephone service at reasonable rates. We look forward to working with you to preserve affordable telephone service. Thank you for this opportunity to testify.

WRITTEN TESTIMONY OF DANNY KELLAR

SUBJECT: Impact of Access Charges on Rural America

Dear Committee Member:

My name is Danny Kellar; General Manager of Coleman County Telephone Cooperative, Inc. located in Santa Anna; Texas; Coleman County Telephone Cooperative; Inc. provides telephone service to parts of three counties: Coleman; Brown and Concho; serving 1;743 members.

As you can tell; we serve the rural area and up to this point; multi-line access charges really haven't affected us. We serve one hundred and fifty small businesses of which sixteen are multi-line users. Of these sixteen; only five businesses have more than two lines. The point I am trying to emphasize is that even though our customers have not really felt the impact of access charges; we foresee definite problems in the future. Should the F.C.C. reverse itself and impose access charges on all users; the results to Coleman County Telephone Cooperative; Inc. could be disastrous, due to the fact that thirty to sixty percent of our customers are either on fixed incomes or below the national wage average.

Not only are our members being affected by deregulation; our company is facing drastic change; causing additional personnel and paper work. This in turn increases our expenditures and the need to seek a rate increase.

Being a telephone company; we are obligated to provide service to any customer who requests it; an obligation that goes hand in hand with the right to be the sole provider. More and more companies want to resell local and long distance telephone service. Developers; universities, hospitals; corporations and government agencies are putting in systems to resell local and long distance service. As the authorized sole supplier in an area; we are charged with the obligation of providing exchange service to everyone on a timely basis; anywhere in our certified area, but without receiving the pro-rata share of the revenue which should be based on our investment. The other common carrier; in my opinion; should operate in our environment and share their revenues instead of passing the cost of the local loop back to the customer in the form of "Access Charges".

A better system could be designed; for example; the system developed for Texas. The Texas IntraLata Toll Pool could be implemented on a national level. (For additional information; please contact our State Organization.)

Being restricted by our service area; we can't pick and choose our customers as can the would be "Long Distance Telephone Companies" who intend to serve the most lucrative customers.

As stated earlier in this testimony; it is our obligation to provide the local loop, thus enabling the other Common Carriers the ability to complete the calls. Therefore a profit sharing relationship would be more equitable and feasible.

We greatly appreciate the opportunity to air our feelings and look forward to working with the Committee in the future.

Sincerely;

Danny Kellar

PREPARED TESTIMONY OF ALVIN M. FUHRMAN

BEFORE THE SPECIAL SMALL BUSINESS PROBLEMS SUBCOMMITTEE OF THE SMALL BUSINESS COMMITTEE:

Dear Congressmen Stenholm, Skelton and Vandergriff:

I appreciate the opportunity to address this Subcommittee of the Special Small Business Committee and to relay to you some unique problems that I as a small business man am presently encountering. My name is Alvin M. Fuhrman. I am President of Muenster Telephone Corporation. We provide service in Muenster and Valley View, Texas, both in Congressman Stenholm's district. My address is P. O. Box 587, Muenster, Texas 76252.

For many years small telephone companies were concerned with providing the best quality service possible at the lowest possible rates to our customers. We recognized that we were monopolies serving our area subject to regulation by the Federal Communications Commission and by the State Public Utility Commission.

At this time the telephone industry is undergoing the most dramatic change ever experienced over the last 100 years. The breakup of the AT&T system, the loss of toll revenue settlements from long distance services, the repricing of long distance service, the imposition of access charges on providers of long distance service, the shift of non-traffic sensitive cost away from long distance users, and the introduction of competition are all greatly effecting a small telephone company at such a fast pace that I find it difficult to stay abreast with the latest changes.

I believe that a small telephone company should have the latest, up-to-date technology to meet the demands for good quality service and the demands from the introduction of competition. The small telephone company like Muenster is unable to participate in the proceedings concerning devistitute of AT&T in the Federal Courts or before proceedings by the Federal Communications Commission. We look to you as our opportunity to express our problems and voice our concerns.

One of the primary problems I am encountering at both the Federal Communication Commission level and with the State Public Utility Commission is the old regulatory concept of long service lives and low depreciation rates which force us to maintain out-of-date or obsolete equipment on our systems and prevent us from up-grading our systems with the latest technology. I have found out that the new companies providing long distance telephone service are virtually deregulated at both the Federal and State level and can offer new service offerings, change rates and enter or leave new service markets without regulatory control. Muenster Telephone Company, on the other hand, is prevented from meeting this type competition by requirements of endless hearings that last in excess of a year concerning new service offerings, rate case that last seven to eight months and the usual red tape that prohibit us the same flexibility afforded our competitors.

Muenster Telephone Company believes that it can provide good quality telephone service using up-to-date equipment to meet these changes in the telephone industry. It is in the best interest of our customers that we remain a viable telephone company able to meet these challenges at both the Federal and State level.

I trust that when you go back to Congress and are subjected to the intense lobbying efforts on behalf of AT&T, MCI and the other long distance telephone service providers, you will remember my comments and problems. I want to keep telephone rates affordable to our customers, I want to provide good service and take advantage of the lastest inovations in technology, but I need your help.

As stated by Jordan J. Baruch recently, "The Cultures of Science and Technology are thus almost opposites - a fact we either ignore or deny when we establish agencies under the rubric of 'science and technology.' If we are to make and implement sound public policy regarding science and technology, we must understand these differences and capitalize on them rather than deny them. Indeed the linking of science and technology that we do routinely may be the first hurdle of denial that we must overcome."

Thank you. Do you have any questions?

PREPARED STATEMENT OF B BROWN
BEFORE THE SMALL BUSINESS SUBCOMMITTEE ON ENERGY, ENVIRONMENT, AND
SAFETY ISSUES AFFECTING SMALL BUSINESS
11 JULY 1984 ABILENE TEXAS KIVA INN

INTRODUCTION

REPRESENTATIVE STENHOLM
MR CHAIRMAN
MEMBERS OF THE COMMITTEE

I AM B BROWN. I AM THE MUZAK FRANCHISEE IN ABILENE, TEXAS.

I HAVE OPERATED THIS FRANCHISE SINCE 1966.

WITH YOUR PERMISSION, I SUBMIT A PREPARED STATEMENT AND I WOULD BE PLEASED IF IT WOULD BE INCLUDED IN THE RECORD OF THIS HEARING.

STATEMENT

SINCE THIS IS AN INQUIRY RELATING TO SMALL BUSINESS, IT IS FITTING THAT WE, WHO SERVE FEWER THAN 100 MUZAK SUBSCRIBERS (CUSTOMERS), HAVE THIS OPPORTUNITY TO COMMENT ON THE EFFECTS OF RATE INCREASE PROPOSALS BEING MADE BY AT&T AND BELL OPERATING COMPANIES FOR PRIVATE LINE SERVICES.

MUZAK FRANCHISEES DEPEND TO A SIGNIFICANT EXTENT ON THE AVAILABILITY OF LEASED TELEPHONE LINES FOR LOCAL DISTRIBUTION OF THE MUZAK PROGRAM SERVICE TO THEIR SUBSCRIBERS (CUSTOMERS). ABILENE, AND A NUMBER OF OTHER FRANCHISE CITIES, DEPEND 100% ON THIS METHOD OF DISTRIBUTION. IN SUCH CITIES NO ALTERNATIVE METHOD IS YET VIABLE. THIS SAME STATEMENT MIGHT BE MADE ABOUT THE SERVICES PROVIDED BY TELEPHONE ANSWERING SERVICE COMPANIES, SECURITY ALARM SERVICE COMPANIES, INDEPENDENT MUSIC OPERATORS, AND PERHAPS MANY OTHERS.

1984 IS THE FIFTIETH ANNIVERSARY OF THE MUZAK PROGRAM SERVICE. MUZAK FRANCHISEES HAVE UTILIZED THE PRIVATE LINE SERVICES OF THESE SAME TELEPHONE FACILITIES SINCE THE BEGINNING OF SUCH MUZAK FRANCHISE OPERATIONS.

UNDER THE PRESENT TARIFF STRUCTURE THE TELEPHONE COMPANY CHARGES REPRESENT A SIGNIFICANT PERCENTAGE OF OUR OPERATING EXPENSE.

CONSIDER THE PROPOSED TARIFF STRUCTURE WITH NEW RATES THAT, I UNDERSTAND, WOULD increase THOSE CHARGES AS MUCH AS 550% TO 10,106%.

I SUBMIT TO YOU, AND FOR THIS RECORD, THAT EVEN AN INCREASE OF 100% WOULD BE DEVASTATING TO OUR OPERATION, AND I FEEL CERTAIN THAT IT WOULD BE VERY DAMAGING TO OTHER SMALL BUSINESS FRANCHISEES.

AN INCREASED RATE STRUCTURE FOR THE TELEPHONE COMPANY WOULD NOT, AND COULD NOT, PROVIDE AN INCREASED OR ENHANCED SERVICE FOR MUZAK FRANCHISEES. THE TELEPHONE COMPANY WOULD NOT BE REQUIRED TO "INVEST" IN LABOR, EQUIPMENT, INCREASED OVERHEAD, OR EVEN ADVERTISING AND PROMOTION. THE TELEPHONE COMPANY WOULD MAKE ONLY ONE CHANGE: THE AMOUNT CHARGED ON THE BILL.

ADDITIONALLY, WE FEEL THE NEW RATE STRUCTURE WAS PROPOSED, IN A COVERT MANNER, IN A SERIES OF VOLUMINOUS AND INCOMPREHENSIBLE FILINGS CONTEMPLATING THAT THESE DRASTIC, EXORBITANT, AND UNJUSTIFIED RATES MIGHT BE "OVERLOOKED" AND BECOME "LAW" BEFORE BEING FOUND AND IDENTIFIED.

WE BELIEVE SUCH RATES ARE IN VIOLATION OF THE COMMUNICATIONS ACT OF 1934 AND WE HOPE SOMEBODY WILL VERIFY THAT.

CONCLUSION

IN CONCLUSION, THE PROPOSED INCREASES ARE UNCONSCIONABLE, BEAR NO RELATION TO TELEPHONE COMPANY COSTS, AND WILL RESULT IN THE COMPLETE LOSS OF OUR MUZAK BUSINESS, HEREIN DESCRIBED. WHILE I RECOGNIZE THIS IS NO PLACE FOR A DRAMATIC APPEAL, I DO FIND IT VERY DISTURBING TO CONTEMPLATE THE POSSIBLE LOSS OF OUR BUSINESS IN SUCH A MANNER. WE WELCOME THIS COMMITTEE'S OVERSIGHT AND CONTROL IN THIS MATTER.

THANK YOU

Appendix I.--National Federation of Independent Business paper on Small Business Problems and Priorities With Miscellaneous Submissions

NFIB® SMALL BUSINESS PROBLEMS AND PRIORITIES

APRIL 1983

NFIB® RESEARCH AND EDUCATION FOUNDATION

FOREWORD

Small Business Problems and Priorities was undertaken for two reasons. The first was highly pragmatic and somewhat parochial. As a small business trade association, NFIB wanted to reassure itself that organizational priorities matched small business priorities. There was no reason a priori to believe the two would not match, and many reasons to believe they would. Nonetheless, a self-examination of this nature was considered healthy, not only for NFIB, but for others interested in small business as well.

The second reason for undertaking Small Business Problems and Priorities was somewhat more abstract. The theme and methodology of the current study does not differ from many studies that have been conducted before. However, Small Business Problems and Priorities is unique in two respects: first, the survey's size permits comparisons and contrasts among various subpopulations, e.g. urban vis-a-vis rural small businesses. Prior research of a similar nature has involved relatively small samples, and has been confined to small businesses in small geographic areas. Second, the problems and priorities of the entire firm are assessed. The conventional approach has been to segment outside influences (macro-economic factors) from inside influences (management factors). This artificial distinction has been eliminated in the current study, thereby permitting an evaluation of the interplay between the small business economy and small business management.

Tables constitute the preponderance of Small Business Problems and Priorities. There is minimal analysis. While the eventual mix of data and interpretation is not as originally designed, it became clear as report preparation proceeded that the emphasis needed to be placed on the raw numbers. So much useful data was available that, given space constraints, analysis was given reduced priority. That gap will be filled by occasional papers.

Single copies of this report are available free by writing NFIB.

Research Department

SMALL BUSINESS PROBLEMS AND PRIORITIES

by

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Summary of Results

- "Interest Rates," "Cost of Liability Insurance," "Cost of Natural Gas, Gasoline, Fuel Oil," "Telephone Rates (Costs)," and "Cash Flow" were evaluated by small business owners as the five most severe small business problems. Those five were followed in order by: "Cost of Property and Casualty Insurance," "Electricity Rates (Costs)," "Payroll Taxes," "Poor Earnings (Profits)," and "Projecting Future Sales Changes."

- Consolidating specific problems into problem or issue areas, "Regulated Costs" was of greatest concern, followed by "Non-Regulated Costs," "Finance," and "Taxation." "Competitors" and "Public Services" were the areas judged as those creating the least severe problems.

- Demographic characteristics of small businesses, e.g., size, industry, location, etc., often were associated with the owners' views of a particular problem's severity. However, with notable exceptions, those associations did not result in strikingly different evaluations by one sub-group or another.

- Individual small business owners find themselves in significantly different business situations. The typical problem evaluated resulted in 5-10% terming it a "Critical Problem" and over 20% terming it "Not a Problem."

- A small firm's industry among the demographic variables examined held greatest association with the owner's view of a particular problem's relative severity.

- Owners of the largest small businesses, as a rule, saw their problems as more severe than did those of other small business sizes. Often there existed a direct relationship between firm size and problem severity--the larger the firm, the more severe the problem.

- Rapidly growing and rapidly contracting small firms, as measured by recent changes in gross sales, were seen to have the most severe problems, particularly in finance. Those with the least severe problems were those experiencing a stable sales volume. Owners of new firms reported problem severity generally to be less than rapidly changing small businesses, but more than established stable firms.

- The rural-urban setting was related to owner problem evaluation in a few obvious instances. But, as a rule, there was little difference in problem evaluation by small entrepreneurs located in metropolitan, small city, or rural areas. The major exception was problems related to employment, with rural employers far more satisfied.

- There was vastly greater commonality than there were differences across State borders among small business problems. Still, major State policy differentials are sometimes evident in small business owners' evaluations of particular problems.

The survey on which this study is based was conducted between mid-October and mid-November, 1982. Twenty thousand nine hundred eighty questionnaires were mailed to a random sample of the NFIB membership; 4,881 usable responses were received, for a response rate of 23%. There is no reason to believe response bias existed, although it is always possible given the response rate.

Reading the Tables

Respondents were asked to rate the severity of each of 72 possible small business problems on a scale of "1" to "6". Checking a "1" meant the problem being evaluated was a "Critical Problem;" checking a "6" meant it was "Not a Problem;" checking numbers between represented varying degrees of problem severity.

Each table in this report contains the term "Mean". Mean is the average of the 1-6 ratings given a particular problem by all respondents. (No Answers were assumed to be average.) As a result, the lower the mean, the more severe a particular problem was believed to be by small business owners as a group.

A second term frequently found is "Rank". Rank is the numerical ordering of means. The lowest mean of all 72 possible small business problems is ranked #1, the second lowest #2, and so on.

Two tables contain "% Terming Problem Critical." The number found under that heading refers to the percent of respondents who checked a "1" or "Critical Problem" in evaluating a specific problem. The standard deviation (Stan. Dev.) is a measure of the consensus or lack thereof among respondents in the evaluation of a problem. The lower the number, the greater the consensus and vice-versa. The "Median" represents the point at which half of the respondents felt a problem more severe and half felt it less.

Comparing results from table to table or even among classes within a table can create some confusion. In making such comparisons, it must be remembered that every small business in the survey has an entire range of characteristics, e.g., a size, an industry, a State location, etc. Often very specific characteristics tend to cluster in groups such as a rural area and agricultural businesses, an urban area and manufacturing businesses, professional businesses and low annual gross, etc. Thus, when looking at the problem evaluations made by one class of business owner, the evaluations represent the characteristics of the class with all its attributes. Each specific characteristic or attribute has not been statistically separated for presentation at this time.

Small Business Problems

"Interest Rates" was judged by small business owners as the most severe of the 72 possible small business problems presented for their evaluation. Over 26% of all respondents termed interest rates a "Critical Problem," the strongest or most extreme rating that could be given. While interest rates are "time bound" in the sense that posing the same question six months earlier or six months later might substantially affect the results, it is clear that during the late autumn of 1982, small business owners were substantially more concerned over the cost of money than they were over any other problem. Given the prime rate at the time the survey was conducted, the result was predictable. But those possible problems which eventually constituted the remainder of the top ten often were not.

"Interest Rates" was followed in order by "Cost of Liability Insurance," "Cost of Natural Gas, Gasoline, Fuel Oil," "Telephone Rates (Costs)," and "Cash Flow" (see Table 1). "Cost of Property and Casualty Insurance," "Electricity Rates (Costs)," "Payroll Taxes," "Poor Earnings (Profits)," and "Projecting Future Sales Changes" rounded out the top ten.

The curious point about those problems falling within the first ten is the dominance of what one might term "regulated costs". Four, and possibly five, problems, depending on classification of "Cost of Natural Gas (regulated), Gasoline (not regulated) and Fuel Oil (not regulated)," are costs effectively regulated by some government body, generally an entity of the States. In fact, if all 72 problems are arbitrarily divided into broad problem or issue areas, the regulated costs issue area clearly was evaluated by small business owners as the most serious source of problems (see Table 2). Non-regulated costs as an issue area followed closely as a matter of small business owner concern.

The only problem or issue area, other than regulated costs, with more than one individual problem among the first ten was "finance." While obtaining loans and equity finance fell in the middle of problems evaluated, "Interest Rates," "Poor Earnings (Profits)," and "Cash Flow" all could be found among the top ten; three more, "Delinquent Accounts; Customer Financing," "Bad Debts and/or Bankruptcies," and "Highly Variable Earnings (Profits)" were ranked in the second ten.

Taxation as a problem or issue area was comparable to finance in terms of overall assessment. The average tax problem was about as serious (or non-serious) as the average finance problem. The difference, however, was that, of the individual tax problems evaluated, only "Payroll Taxes" ranked in the first ten. Other tax and tax-related problems were somewhat lower in priority.

Five additional problem or issue areas, i.e. employment, information, management, regulatory, and sales, were similar in their overall severity, and ranked behind those previously noted. Among employment problems, "Payroll Taxes" (#8) and "Locating Qualified Employees" (#15) were considered most severe; "Projecting Future Sales Changes" (#10) and "Cost of Outside Help" (#27) were of greatest concern in the information area; "Cash Flow" (#5) and "Projecting Future Sales Changes" (#10) led management problems; "Federal Paperwork" (#12) and "Unreasonable Government Regulations" (#14) were considered most serious in the regulatory area; and the most severe problems in sales were "Projecting Future Sales Changes" (#10) and "Ability to Cost-Effectively Advertise" (#26).

Many often alleged serious difficulties were down the list. "Obtaining Investor Financing," for example, ranked #53, behind such problems as "Pricing Goods/Services" (#42) and "Fair State/Local Inspections" (#50). A second example, "Adequate Parking or Public Transportation," ranked #62 behind such problems as "Shortages of Materials, Goods, Fuel, Etc." (#59) and "Anti-Competitive Practices, e.g., Price Fixing" (#61).

At the bottom end of the problem severity scale came "Garbage Collection" (#72), "Competition from the Federal Government" (#71), "Competition from Non-Profit Organizations, e.g., Universities" (#70), "Competition from State or Local Government" (#69), and "Employee (Labor) Unions" (#68).

Least concern among problem or issue areas was expressed over competitors and public services. In fact, except for "Competition from Large Business" (#21), other groups of competitors and anti-competitive practices were infrequently considered problems. While opportunity costs (which may be lost due to other competitors) are often difficult to evaluate and may not be fully appreciated by many small business owners, it is clear that problems with groups of competitors are not well focused. Further, there appeared no major demand for enhanced public services at any jurisdictional level. "Getting Information on Government Business Assistance Programs" (#43) and "Cost-Effective Mail Service" (#44) were the two public service areas which created the most problems for small business owners.

Every problem doesn't impact every small business equally or in the same manner. While a general consensus among small businessmen and women may exist on the severity of a particular problem, what

Table 1

Severity of Small Business Problems

Problem	Rank	Mean	Median	Stan Dev	% Terming Problem "Critical"
Interest Rates	1	2.79	2.41	1.63	26.3
Cost of Liability Insurance	2	2.96	2.75	1.52	18.4
Cost of Natural Gas, Gasoline, Fuel Oil	3	3.04	2.78	1.62	19.3
Telephone Rates (Costs)	4	3.11	2.97	1.43	12.8
Cash Flow	5	3.13	2.93	1.62	19.0
Cost of Property and Casualty Insurance	6	3.17	2.99	1.53	14.7
Electricity Rates (Costs)	7	3.17	2.93	1.63	16.6
Payroll Taxes	8	3.44	3.15	1.65	12.5
Poor Earnings (Profits)	9	3.56	3.36	1.71	15.0
Projecting Future Sales Changes	10	3.57	3.30	1.54	8.3
Federal Business Income Tax	11	3.59	3.30	1.64	10.6
Federal Paperwork	12	3.66	3.39	1.46	6.0
Highly Variable Earnings (Profits)	13	3.66	3.38	1.66	10.5
Unreasonable Government Regulations	14	3.73	3.57	1.59	8.5
Locating Qualified Employees	15	3.74	3.45	1.68	10.3
Delinquent Accounts; Customer Financing	16	3.75	3.56	1.70	11.2
Bad Debts and/or Bankruptcies	17	3.76	3.61	1.67	10.4
Employee Benefit Costs	18	3.78	3.48	1.67	8.8
Cost of Inventory/ Supplies	19	3.90	3.74	1.58	6.0
State/Local Paperwork	20	3.91	3.80	1.43	4.5
Competition from Large Businesses	21	3.93	3.90	1.67	8.6
Training Employees	22	4.01	3.91	1.53	4.9
Controlling My Own Time	23	4.03	3.99	1.54	5.0
Fixed Costs Too High	24	4.07	4.17	1.62	6.7
State Business Income Tax	25	4.09	4.07	1.66	6.9
Ability to Cost-Effectively Advertise	26	4.17	4.27	1.66	6.2
Cost of Outside Business Help	27	4.20	4.23	1.52	3.2

Table 1

Severity of Small Business Problems
(Continued)

Problem	Rank	Mean	Median	Stan Dev	% Terming Problem "Critical"
Finding Out About Regulatory Requirements	28	4.21	4.38	1.54	4.8
Poor Sales	29	4.24	4.63	1.62	7.4
Cost of Facilities (including Rent and/or Mortgage Costs)	30	4.26	4.43	1.61	5.8
Keeping Up on Business and Market Developments	31	4.31	4.34	1.44	2.8
Collecting Sales and/or Excise Taxes for Government	32	4.32	4.62	1.71	7.6
Low Worker Productivity	32	4.32	4.60	1.57	5.7
Obtaining Good Supervisory Personnel	34	4.36	4.86	1.70	6.1
Sales Too Dependent on Health of One Business or Industry	34	4.36	4.96	1.75	8.5
Locating Business Help When Needed	36	4.50	4.78	1.49	3.4
Sales Too Seasonal	37	4.50	4.92	1.57	4.9
Obtaining Long-Term Loans	38	4.51	5.17	1.70	7.9
Cost of Government Required Equipment/Procedures	39	4.52	4.96	1.58	5.0
Death (Estate) Taxes	40	4.53	5.21	1.70	7.4
Getting Useful Business Information	41	4.53	4.71	1.43	2.3
Pricing Goods/Services	42	4.56	4.85	1.45	2.3
Getting Information on Government Business Assistance Programs	43	4.63	5.20	1.55	4.0
Cost-Effective Mail Service	44	4.64	5.20	1.53	3.4
Obtaining Short-Term Loans	45	4.67	5.42	1.60	5.9
Applications for Licenses, Permits, Etc.	46	4.69	5.11	1.44	2.7
Handling Business Growth	47	4.70	5.14	1.43	2.0

Table 1

Severity of Small Business Problems
(Continued)

Problem	Rank	Mean	Median	Stan Dev	% Terming Problem "Critical"
Controlling Inventory	48	4.71	5.15	1.41	1.9
Shoplifting, Pilferage, Bad Checks, etc.	49	4.84	5.42	1.41	2.9
Fair State/Local Inspections	50	4.89	5.42	1.32	1.9
Local Promotion of Local Business	51	5.05	5.66	1.37	2.4
Losing Skilled Employees to Large Firms	52	5.07	5.67	1.38	2.5
Obtaining Investor Financing	53	5.09	5.75	1.52	5.0
Locating Satisfactory Suppliers	54	5.10	5.63	1.29	2.3
Good Highways and Roads	55	5.15	5.73	1.38	3.1
Selling to the Federal Government	56	5.16	5.77	1.43	3.4
Fair Federal Inspections	57	5.20	5.67	1.18	1.0
Street Crime	58	5.21	5.70	1.25	1.8
Shortages of Materials, Goods, Fuel, etc.	59	5.22	5.69	1.20	1.1
Selling to State/Local Government	60	5.24	5.77	1.32	2.5
Anti-Competitive Practices, e.g. Price Fixing	61	5.26	5.79	1.37	3.7
Adequate Parking or Public Transportation	62	5.28	5.79	1.28	2.1
Shipping or Receiving Shipped Goods	63	5.33	5.74	1.12	0.9
Competition from Imported Products	64	5.35	5.84	1.32	3.3
Littered or Unattractive Business Area	65	5.37	5.77	1.15	1.6
Police and Fire Protection	66	5.38	5.79	1.13	1.2
Poor Business Location	67	5.47	5.84	1.01	1.1
Employee (Labor) Unions	68	5.49	5.86	1.19	2.8
Competition from State or Local Government	69	5.52	5.88	1.12	1.8
Competition from Non-Profit Organizations, e.g. Universities	70	5.55	5.88	1.08	1.6

Table 1

Severity of Small Business Problems
(Continued)

Problem	Rank	Mean	Median	Stan Dev	% Terming Problem "Critical"
Competition from the Federal Government	71	5.62	5.91	1.03	1.6
Garbage Collection	72	5.64	5.89	0.90	0.7

may be a critical problem for one business may be no problem at all for another. For example, a home builder almost assuredly would have considered interest rates a critical problem, but a small garage owner with no debts outstanding may have had no more than an academic interest in the subject.

Of the 72 potential problems offered for evaluation, 10% or more of respondents described 14 specific problems as "Critical." Two percent or more provided that description for 59 specific problems. On only two occasions, "Shipping or Receiving Shipped Goods" and "Garbage Collection," did the number of small business owners terming the problem "Critical" fall below 1%.

Small entrepreneurs were considerably more apt to evaluate a particular problem as "Not a Problem" than to evaluate one as "Critical." In fact, only once, i.e. "Telephone Rates (Costs)," did fewer than 10% describe a potential difficulty as "Not a Problem." Nine others received the same evaluation by fewer than 20%. On the other hand, 2/3's or more of all respondents described 14 separate possible problems as "Not a Problem".

The degree of small business consensus (or lack thereof) in evaluating the seriousness of a specific problem can be seen in Table 1, Column "Stan. Dev." (The higher the number, the smaller the degree of consensus over a problem's severity and vice versa.) The least consensus was demonstrated on "Sales Too Dependent on Health of One Business or Industry," "Poor Earnings (Profits)," "Collecting Sales and/or Excise Taxes for Government," "Obtaining Long-Term Loans," "Death (Estate) Taxes," "Delinquent Accounts; Customer Financing" and "Obtaining Good Supervisory Personnel." Each of the problems on which little consensus existed ranked in the middle to the more serious end of the problem severity scale, but only one ranked in the first fifteen.

Table 2

Severity of Small Business Problems by Functional Area*

	Rank	Mean	% Terming Problem "Critical"
Competitors			
Competition from Large Business	21	3.90	8.6%
Competition from Imported Products	64	5.35	3.3%
Competition from the Federal Govt	71	5.62	21.6%
Competition from State or Local Government	69	5.52	1.8%
Competition from Non-Profit Organizations, e.g. Universities	70	5.55	1.6%
Anti-Competitive Practices, e.g. Price Fixing	61	5.26	3.7%
Mean	(59)	(5.20)	(3.4%)
Costs--Non-Regulated			
Cost of Outside Business Help	27	4.20	3.2%
Cost of Natural Gas, Gasoline, Fuel Oil	3	3.04	19.3%
Interest Rates	1	2.79	26.3%
Employee Benefit Costs	18	3.78	8.8%
Cost of Facilities (including Rent and/or Mortgage Costs)	30	4.26	5.8%
Cost of Inventory/Supplies	19	3.90	6.0%
Ability to Cost-Effectively Advertise	26	4.17	6.2%
Cost of Government Required Equipment/Procedures	39	4.52	5.0%
Mean	(20)	(3.83)	(10.1%)
Costs--Regulated			
Electricity Rates (Costs)	7	3.17	16.6%
Telephone Rates (Costs)	4	3.11	12.8%
Cost of Natural Gas, Gasoline, and Fuel Oil	3	3.04	19.3%
Cost of Liability Insurance	2	2.96	18.4%
Cost of Property and Casualty Insurance	6	3.17	14.7%
Cost-Effective Mail Service	44	4.64	3.4%
Cost of Government Required Equipment/Procedures	39	4.52	5.0%
Mean	(15)	(3.52)	(12.9%)
Employment			
Locating Qualified Employees	15	3.74	10.3%
Obtaining Good Supervisory Personnel	34	4.36	8.5%

Table 2
(Continued)

Severity of Small Business Problems by Functional Area*

	Rank	Mean	% Terming Problem "Critical"
Employment (cont.)			
Training Employees	22	3.91	4.9%
Low Worker Productivity	32	4.32	7.6%
Employee Benefits Cost	18	3.78	8.8%
Payroll Taxes	8	3.44	12.5%
Employee (Labor) Unions	68	5.49	2.8%
Losing Skilled Employees to Large Firms	52	5.07	2.5%
Mean	(31)	(4.26)	(7.2%)
Finance			
Delinquent Accounts; Customer Financing	16	3.75	11.2%
Obtaining Investor Financing	53	5.09	5.0%
Obtaining Short-Term Loans	45	4.67	5.9%
Obtaining Long-Term Loans	38	4.51	7.9%
Interest Rates	1	2.79	26.3%
Bad Debts and/or Bankruptcies	17	3.76	10.4%
Cash Flow	5	3.13	19.0%
Poor Earnings (Profits)	9	3.56	15.0%
Highly Variable Earnings (Profits)	13	3.66	10.5%
Mean	(22)	(3.88)	(12.4%)
Information			
Getting Useful Business Information	41	4.53	2.3%
Projecting Future Sales Changes	10	3.57	8.3%
Keeping Up on Business and Market Developments	31	4.31	2.8%
Finding Out About Regulatory Requirements	28	4.21	4.8%
Getting Information on Government Business Assistance	43	4.63	4.0%
Locating Business Help When Needed	36	4.50	3.4%
Cost of Outside Help	27	4.20	3.2%
Locating Satisfactory Supplies	54	5.10	2.3%
Mean	(34)	(4.38)	(3.9%)
Management			
Controlling My Own Time	23	3.99	5.0%
Projecting Future Sales Changes	10	3.57	8.3%
Handling Business Growth	47	4.70	2.0%

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Table 2
(Continued)

Severity of Small Business Problems by Functional Area*

	Rank	Mean	% Terming Problem "Critical"
Management (cont.)			
Pricing Goods/Services	42	4.56	2.3%
Controlling Inventory	48	4.71	1.9%
Poor Business Location	67	5.47	1.1%
Fixed Costs Too High	24	4.07	6.7%
Cash Flow	5	3.13	19.0%
Training Employees	22	3.91	4.9%
Keeping Up on Business and Market Developments	31	4.31	2.8%
Mean	(32)	(4.24)	(5.7%)
Public Services			
Getting Information on Government Business Assistance Programs	43	4.63	4.0%
Cost-Effective Mail Service	44	4.64	3.4%
Local Promotion of Local Business	51	5.05	2.4%
Good Highways and Roads	55	5.15	3.1%
Street Crime	58	5.21	1.8%
Adequate Parking or Public Transportation	62	5.28	2.1%
Police and Fire Protection	66	5.38	1.2%
Garbage Collection	72	5.64	0.7%
Mean	(56)	(5.12)	2.3%
Regulatory			
Federal Paperwork	12	3.66	6.0%
State/Local Paperwork	20	3.91	4.5%
Applications for Licenses, Permits, etc.	46	4.69	2.7%
Fair Federal Inspections	57	5.20	1.0%
Fair State/Local Inspections	50	4.89	1.9%
Finding Out About Regulatory Requirements	28	4.21	4.8%
Unreasonable Government Regulations	14	3.73	8.5%
Cost of Government Required Equipment/Procedures	39	4.52	5.0%
Mean	(33)	(4.35)	(4.3%)
Sales			
Poor Sales	29	4.24	7.4%
Sales Too Seasonal	37	4.50	4.9%

Table 2
(Continued)

Severity of Small Business Problems by Functional Area*

	Rank	Mean	% Terming Problem "Critical"
Sales (cont.)			
Sales Too Dependent on Health of One Business or Industry	34	4.36	8.5%
Selling to the Federal Government	56	5.16	3.4%
Selling to State/Local Government	60	5.24	2.5%
Ability to Cost-Effectively Advertise	26	4.17	6.2%
Projecting Future Sales Changes	10	3.57	8.3%
Keeping Up on Business and Market Developments	31	4.31	2.8%
Mean	(35)	(4.44)	(5.5%)
Taxation			
Payroll Taxes	8	3.44	12.5%
Federal Business Income Tax	11	3.59	10.6%
State Business Income Tax	25	4.09	6.9%
Death (Estate) Taxes	40	4.53	7.4%
Collecting Sales and/or Excise Taxes for Government	32	4.32	7.6%
Federal Paperwork	12	3.66	6.0%
State/Local Paperwork	20	3.91	4.5%
Mean	(21)	(3.93)	(7.9%)

*Individual problems are often listed under more than one classification. "Shoplifting, Pilferage, Bad Checks, etc.," "Shortages of Materials, Goods, etc.," "Shipping or Receiving Shipped Goods, "and "Littered or Unattractive Business Area" didn't logically fit in any classification, so were excluded altogether.

Small Business Problems Among Industries

Of all demographic variables examined, industry provided the greatest differences in the views of small entrepreneurs toward their problems (see Table 3). While few of these industry-to-industry differences could be termed "surprising," they clearly illustrated the different milieux in which these small businesses operate and the associated industry-specific difficulties.

With the construction industry having been beaten about by recession and high interest rates, it is little wonder that owners of small construction firms generally felt their problems to be more severe than did others. But curiously enough, on only six occasions was the ranking of a particularly problem "out of order" (defined as more than 10 places removed from the total population's evaluation). Where specific problems were "out of order," it was to be expected. For example, we would anticipate construction firms having more difficulties with applications for licenses and permits than others, and indeed they did; the same would hold for seasonal sales. On the other hand, with much of the contracting work being done outdoors and during daylight hours, one could reasonably anticipate, as was the case, that electricity rates would be less a problem for construction firms than would they would be for others.

Manufacturers and wholesalers didn't provide any surprises, either. Just three problems were out of order for manufacturers, headed by "Low Worker Productivity" rising 14 notches to #19 and five for wholesalers. Interestingly, among wholesalers "Sales Too Dependent on Health of One Business or Industry" rose from #35 to #24.

While transportation was the fourth industry to provide no surprises, the prevalence of regulation was clearly discernible. "Cost of Government Required/Procedures" ranked #39 for all small businesses; it ranked #16 for owners of transportation businesses. "Applications for Licenses, Permits, etc." ranked #46 for the entire population; for small transportation firms, the ranking was #18. "Fair State/Local Inspections" and "Fair Federal Inspections" were also "out of order" among small transportation firms. And while neither "Federal Paperwork" nor "State/Local Paperwork" was "out of order" as the term has been defined, owners of transportation firms reported more severe problems with paperwork than did any other sector.

Since retail provided the single largest group of respondents (31%), it is relatively difficult for a problem evaluated by retailers to be "out of order". Yet four were "out of order," indicating that retail had some severe industry-specific problems. "Ability to Cost-Effectively Advertise" jumped from #26 to #12 for retailers; "Collecting Sales and/or Excise Taxes for Government" moved from #32 to #18; "Controlling Inventory" shifted from #48 to #32 (almost the identical numbers among wholesalers); and "Shoplifting, Pilferage, Bad Checks, etc." jumped up the list nineteen places to #28. One modest surprise was found. The most severe problem of small retailers was "Electricity Rates (Costs)."

The three service sectors were particularly interesting. Eleven problems were out of order among the financial services, 14 among the professional services, but only one among the non-professional services. The latter involved "Poor Sales," which moved from #29 down to #40.

The professions appear to be somewhat different. They evaluated their problems as being less severe than did others; they

Table 3

Severity of Small Business Problems
By Industry

Problem	Construction		Manufacturing		Transportation	
	Rank	Mean	Rank	Mean	Rank	Mean
Interest Rates	1	2.41	1	2.85	3	2.59
Cost of Liability Insurance	2	2.57	2	2.96	2	2.58
Cost of Natural Gas, Gasoline, Fuel Oil	3	2.79	3	3.15	1	2.38
Telephone Rates (Costs)	6	3.17	7	3.23	6	2.98
Cash Flow	5	2.89	3	3.15	10	3.30
Cost of Property and Casualty Insurance	4	2.83	6	3.22	4	2.64
Electricity Rates (Costs)	18	3.62	5	3.19	11	3.39
Payroll Taxes	7	3.18	8	3.22	8	3.25
Poor Earnings (Profits)	10	3.27	15	3.77	13	3.47
Projecting Future Sales Changes	14	3.41	9	3.39	23	3.86
Federal Business Income Tax	8	3.22	11	3.53	9	3.26
Federal Paperwork	11	3.34	12	3.68	7	3.21
Highly Variable Earnings (Profits)	9	3.24	14	3.72	14	3.53
Unreasonable Government Regulations	17	3.49	17	3.81	5	2.94
Locating Qualified Employees	15	3.43	12	3.68	20	3.78
Delinquent Accounts; Customer Financing	13	3.40	16	3.79	20	3.78
Bad Debts and/or Bankruptcies	15	3.43	19	3.88	24	3.87
Employee Benefit Costs	11	3.34	10	3.42	12	3.45
Cost of Inventory/Supplies	25	3.94	22	3.93	24	3.87
State/Local Paperwork	19	3.77	23	3.96	15	3.56
Competition from Large Businesses	30	4.12	28	4.12	27	4.04
Training Employees	23	3.90	18	3.85	29	4.14
Controlling My Own Time	28	4.08	25	4.03	30	4.19
Fixed Costs Too High	30	4.12	32	4.28	28	4.05
State Business Income Tax	22	3.83	21	3.92	22	3.85
Ability to Cost-Effectively Advertise	38	4.44	41	4.59	47	4.67

Table 3

Problems By Industry
(Continued)

Wholesale		Retail		Agriculture		Financial Services		Services		Professions	
Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean
1	2.66	3	3.82	1	2.38	1	2.67	6	3.19	2	3.09
2	2.90	2	2.80	6	3.10	21	4.10	1	2.96	1	3.06
2	2.90	4	2.89	2	2.47	4	3.51	2	3.06	18	4.01
4	2.96	6	3.05	10	3.50	2	3.04	2	3.06	3	3.28
4	2.96	7	3.06	4	2.88	3	3.43	7	3.41	3	3.28
6	3.02	4	2.89	7	3.12	30	4.53	4	3.08	10	3.83
8	3.22	1	2.65	5	3.06	12	3.79	5	3.17	15	3.89
13	3.34	9	3.46	15	3.74	9	3.76	8	3.57	5	3.30
15	3.52	8	3.42	3	2.75	16	3.93	10	3.73	20	4.08
10	3.27	11	3.55	12	3.57	7	3.70	12	3.76	22	4.20
11	3.29	13	3.60	14	3.73	14	3.90	10	3.73	17	3.98
16	3.57	16	3.73	16	3.79	6	3.69	16	3.99	7	3.40
17	3.60	15	3.72	8	3.29	17	4.00	12	3.76	10	3.83
18	3.62	21	3.86	11	3.51	5	3.52	20	4.10	8	3.50
20	3.74	17	3.77	18	4.02	13	3.89	9	3.71	16	3.90
8	3.22	22	3.88	38	4.52	10	3.78	17	4.01	6	3.32
7	3.03	18	3.82	26	4.25	8	3.74	25	4.23	9	3.63
12	3.32	25	3.96	24	4.15	23	4.13	14	3.94	19	4.05
27	3.99	10	3.50	13	3.68	47	5.13	15	3.95	30	4.59
19	3.72	20	3.85	18	4.02	19	4.08	24	4.22	14	3.87
14	3.44	14	3.62	25	4.20	10	3.78	30	4.46	25	4.30
21	3.81	29	4.13	29	4.35	22	4.12	17	4.01	12	3.84
28	4.02	24	3.95	32	4.38	20	4.09	19	4.09	13	3.86
26	3.98	23	3.89	9	3.44	28	4.42	21	4.12	28	4.43
22	3.89	26	4.06	29	4.35	26	4.36	26	4.24	27	4.42
34	4.25	12	3.56	48	4.86	18	4.06	22	4.14	47	5.16

Table 3

Problems By Industry
(Continued)

Problem	Construction Rank	Construction Mean	Manufacturing Rank	Manufacturing Mean	Transportation Rank	Transportation Mean
Cost of Outside Business Help	33	4.27	30	4.19	44	4.65
Finding Out About Regulatory Requirements	27	4.02	31	4.26	18	3.77
Poor Sales	21	3.79	26	4.06	35	4.29
Cost of Facilities (including Rent and/or Mortgage Costs)	37	4.43	38	4.52	31	4.20
Keeping Up on Business and Market Developments	34	4.37	33	4.33	37	4.35
Collecting Sales and/or Excise Taxes for Government	35	4.39	29	4.17	34	4.25
Low Worker Productivity	31	4.16	19	3.88	33	4.24
Obtaining Good Supervisory Personnel	21	3.85	26	4.06	39	4.44
Sales Too Dependent on Health of One Business or Industry	19	3.77	24	4.02	16	3.76
Locating Business Help When Needed	39	4.46	41	4.59	44	4.65
Sales Too Seasonal	26	3.97	47	4.77	32	4.21
Obtaining Long-Term Loans	33	4.34	39	4.56	42	4.55
Cost of Government Required Equipment/ Procedures	29	4.07	34	4.34	16	3.76
Death (Estate) Taxes	36	4.42	36	4.44	38	4.43
Getting Useful Business Information	45	4.56	40	4.58	43	4.58
Pricing Goods/Services	43	4.54	35	4.40	40	4.50
Getting Information on Government Business Assistance Programs	40	4.50	48	4.79	48	4.68
Cost-Effective Mail Service	47	4.66	44	4.67	40	4.50
Obtaining Short-Term Loans	42	4.52	45	4.70	49	4.69
Applications for Licenses, Permits, Etc.	32	4.24	46	4.76	18	3.77

Table 3

Problems By Industry
(Continued)

Wholesale		Retail		Agriculture		Financial Services		Services		Professions	
Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean
40	4.46	36	4.38	33	4.47	34	4.75	31	4.48	34	4.73
32	4.15	31	4.22	28	4.29	25	4.33	28	4.41	21	4.10
24	3.92	29	4.13	21	4.12	30	4.53	40	4.64	45	5.07
36	4.30	27	4.10	26	4.25	27	4.41	23	4.17	22	4.20
34	4.25	32	4.26	22	4.13	24	4.28	29	4.44	24	4.31
23	3.90	18	3.82	53	5.06	54	5.29	27	4.38	55	5.40
29	4.10	34	4.33	37	4.51	33	4.72	31	4.48	36	4.78
31	4.13	38	4.42	44	4.80	37	4.76	36	4.54	33	4.63
24	3.92	43	4.57	22	4.13	32	4.57	45	4.79	37	4.81
40	4.46	36	4.38	33	4.47	34	4.75	31	4.48	34	4.73
45	4.51	35	4.35	20	4.11	52	5.25	39	4.62	41	4.92
40	4.46	40	4.48	35	4.49	28	4.42	35	4.53	40	4.88
37	4.35	44	4.60	35	4.49	43	4.89	43	4.71	42	4.93
33	4.22	42	4.49	17	3.93	39	4.80	44	4.78	43	4.96
44	4.48	38	4.42	41	4.75	34	4.75	34	4.52	32	4.62
39	4.44	46	4.66	31	4.37	42	4.88	38	4.60	26	4.32
50	4.71	40	4.48	43	4.80	43	4.89	37	4.59	37	4.81
38	4.41	49	4.78	55	5.14	15	3.91	46	4.87	29	4.48
49	4.68	44	4.60	41	4.75	38	4.78	41	4.65	44	4.97
47	4.62	48	4.76	39	4.57	39	4.80	47	4.97	39	4.87

Table 3

Problems By Industry
(Continued)

Problem	Construction		Manufacturing		Transportation	
	Rank	Mean	Rank	Mean	Rank	Mean
Handling Business Growth	46	4.62	37	4.51	50	4.75
Controlling Inventory	48	4.77	43	4.60	58	5.12
Shoplifting, Pilferage, Bad Checks, etc.	55	5.02	63	5.39	52	4.93
Fair State/Local Inspections	41	4.51	49	4.80	36	4.34
Local Promotion of Local Business	55	5.02	61	5.35	56	5.07
Losing Skilled Employees to Large Firms	54	4.97	51	4.91	57	5.09
Obtaining Investor Financing	48	4.77	56	5.14	61	5.19
Locating Satisfactory Suppliers	53	4.94	53	5.05	51	4.90
Good Highways and Roads	57	5.05	58	5.30	26	4.01
Selling to the Federal Government	50	4.80	50	4.89	62	5.21
Fair Federal Inspection	52	4.91	52	4.94	46	4.66
Street Crime	59	5.11	61	5.35	54	4.98
Shortages of Materials, Goods, Fuel, etc.	51	4.87	55	5.12	60	5.17
Selling to State/Local Government	52	4.91	57	5.22	59	5.13
Anti-Competitive Practices, e.g. Price Fixing	60	5.13	67	5.48	52	4.93
Adequate Parking or Public Transportation	65	5.57	65	5.42	65	5.40
Shipping or Receiving Shipped Goods	58	5.07	59	5.31	68	5.49
Competition from Imported Products	66	5.59	54	5.08	71	5.61
Littered or Unattractive Business Area	63	5.41	66	5.47	66	5.43
Police and Fire Protection	61	5.37	63	5.39	64	5.35
Poor Business Location	64	5.56	68	5.52	72	5.65
Employee (Labor) Unions	43	4.54	60	5.33	55	5.05
Competition from State or Local Government	62	5.38	71	5.76	63	5.28

Table 3

Problems By Industry
(Continued)

Wholesale		Retail		Agriculture		Financial Services		Services		Professions	
Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean
40	4.46	50	4.82	49	4.88	41	4.87	42	4.67	31	4.60
30	4.11	32	4.26	43	4.80	67	5.70	48	5.02	59	5.49
53	4.78	58	5.16	47	4.81	59	5.49	60	5.35	65	5.62
48	4.67	52	5.00	72	5.77	53	5.27	55	5.19	48	5.26
63	5.32	61	5.23	59	5.24	68	5.79	63	5.41	67	5.69
57	5.08	65	5.30	19	4.03	72	5.83	70	5.67	71	5.89
60	5.14	59	5.19	68	5.64+	61	5.54	62	5.39	59	5.49
55	5.06	63	5.27	59	5.24	60	5.51	64	5.43	66	5.64
58	5.10	62	5.24	60	5.61	64	5.66	67	5.50	68	5.71
46	4.59	72	5.67	70	5.66	68	5.79	72	5.78	71	5.89
54	5.03	70	5.56	68	5.64	55	5.37	67	5.50	51	5.36
62	5.21	68	5.49	65	5.59	63	5.56	65	5.47	50	5.30
56	5.07	71	5.66	61	5.26	56	5.41	69	5.66	59	5.49
51	4.72	68	5.49	71	5.72	70	5.81	70	5.67	70	5.77
61	5.15	28	4.11	58	5.23	57	5.43	50	5.04	62	5.53
68	5.59	51	4.91	40	4.69	51	5.23	52	5.13	51	5.36
59	5.12	47	4.75	64	5.42	46	5.10	51	5.10	49	5.27
52	4.77	55	5.07	57	5.21	49	5.22	54	5.14	46	5.14
66	5.44	57	5.14	56	5.15	45	4.90	52	5.13	53	5.37
65	5.43	53	5.02	51	5.04	61	5.54	49	5.03	63	5.56
68	5.59	59	5.19	42	4.77	47	5.17	55	5.19	55	5.40
64	5.39	67	5.31	54	5.07	66	5.69	58	5.32	57	5.41
67	5.57	64	5.28	50	4.97	58	5.48	65	5.47	58	5.48

Table 3

Problems By Industry
(Continued)

Problem	Construction Rank	Construction Mean	Manufacturing Rank	Manufacturing Mean	Transportation Rank	Transportation Mean
Competition from Non-Profit Organizations, e.g. Universities	69	5.72	70	5.72	69	5.55
Competition from the Federal Government	67	5.62	72	5.81	67	5.46
Garbage Collection	68	5.67	69	5.71	70	5.59

were more concerned about paperwork, regulatory matters, and time factors than were others, however not sufficiently to place them "out of order;" and they most frequently cited government competition with the private sector (along with the financial services). Three of the problems falling in the top ten were "out of order" for professional service firms. "Telephone Rates (Costs)" fell from #4 to #18; "Poor Earnings (Profits)" fell from #9 to #20; and, "Projecting Future Sales Changes" fell from #10 to #22.

Financial service firms evaluated two top ten problems "out of order". "Cost of Liability Insurance" dropped from #2 to #21 and "Cost of Property and Casualty Insurance" dropped from #6 to #30. In a reversal, "Competition from Large Business" rose from #21 to #10. The largest change occurred on "Cost-Effective Mail Service". The problem rose 29 places, from #44 to #15.

Agriculture was another different industry. In this industry, problems "out of order" focused on the seasonal nature of such businesses and the large capital costs frequently involved. However, "Competition from Imported Products" rose from #64 to #19 among agricultural firms, the single largest shift from the total population's evaluation found in any industry.

Small Business Problems and Firm Size

A priori one probably would have expected that the smaller the firm, the more severe its problems. While that phenomenon might have been tempered on certain problems simply because many smaller businesses were unaffected, it seemed a rational view. The view may have been rational, but it wasn't accurate.

Table 3

Problems By Industry
(Continued)

Wholesale		Retail		Agriculture		Financial Services		Services		Professions	
Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean
70	5.61	54	5.06	67	5.63	49	5.22	57	5.27	64	5.61
71	5.68	56	5.12	62	5.30	71	5.82	59	5.34	69	5.74
72	5.72	65	5.30	63	5.41	65	5.67	60	5.35	54	5.39

It was the owners of the largest small businesses--$3,000,000 or more in annual gross--that consistently reported their problems as being severe, rather than those of other size classes (see Table 4). In fact, of the highest ranked 20 problems (for the entire population of small businesses), 13 were evaluated most severe by the largest of small entrepreneurs. At the other end of the scale, owners of the smallest size class evaluated problems as least severe for 19 of the first 20 problems.

The result was usually a direct relationship between firm size and owner perception of problem severity. However, the relationship was not often "clean," due to size classes between the two extremes which from time to time fell out of line. Where they did exist, the "cleanest" direct relationships tended to occur on regulatory matters. "Cost of Government Required Equipment/Procedures" and "State/Local Paperwork" are excellent examples.

One can only speculate on the reason for the relationships as they proved to be. However, a reasonable explanation is that owners of larger small firms simply have "more balls in the air" at any one time than do owners of smaller small firms. A compounding effect occurs, as a result leaving owners of larger small businesses not only affected by a broader range of problems, but also less time to deal with any single one.

Problems and Small Business Growth

At first blush one would tend to believe that as sales volume increased, the severity of most business problems would subside and vice versa--the idea is that as sales grow, conducting a business

Table 4

Severity of Small Business Problems
By Annual Gross Receipts

Problem	Less Than $100* Rank	Less Than $100* Mean	$100-$199 Rank	$100-$199 Mean	$200-$349 Rank	$200-$349 Mean
Interest Rates	1	3.14	1	2.89	1	2.75
Cost of Liability Insurance	3	3.21	2	2.92	2	2.89
Cost of Natural Gas, Gasoline, Fuel Oil	4	3.25	3	3.04	4	3.03
Telephone Rates (Costs)	2	3.18	6	3.18	7	3.13
Cash Flow	5	3.29	5	3.14	3	3.02
Cost of Property and Casualty Insurance	6	3.40	4	3.12	5	3.09
Electricity Rates (Costs)	6	3.40	7	3.26	6	3.10
Payroll Taxes	13	4.08	8	3.48	8	3.23
Poor Earnings (Profits)	8	3.49	9	3.62	9	3.51
Projecting Future Sales Changes	11	3.91	11	3.72	11	3.62
Federal Business Income Tax	12	3.95	10	3.67	13	3.65
Federal Paperwork	13	4.08	13	3.78	14	3.68
Highly Variable Earnings (Profits)	9	3.86	12	3.75	12	3.64
Unreasonable Government Regulations	10	3.88	16	3.86	15	3.71
Locating Qualified Employees	17	4.10	14	3.81	10	3.61
Delinquent Accounts; Customer Financing	23	4.26	15	3.83	16	3.75
Bad Debts and/or Bankruptcies	26	4.34	20	4.03	17	3.80
Employee Benefit Costs	36	4.57	22	4.09	19	3.94
Cost of Inventory/ Supplies	16	4.09	17	3.92	19	3.94
State/Local Paperwork	22	4.23	18	3.96	19	3.94
Competition from Large Businesses	18	4.15	21	4.04	22	3.96
Training Employees	31	4.48	24	4.11	23	4.00
Controlling My Own Time	19	4.16	22	4.09	18	3.88
Fixed Costs Too High	21	4.21	19	4.00	24	4.04
State Business Income Tax	28	4.38	29	4.27	25	4.10

Table 4

Problems by Annual Gross Receipts
(Continued)

$350-$499*		$500-$749		$750-$1,499		$1,500-$2,999		$3,000 or More	
Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean
1	2.78	1	2.73	1	2.69	1	2.47	1	2.43
2	2.92	2	2.85	2	2.88	2	3.01	3	2.88
3	2.96	3	2.97	3	3.04	3	3.02	2	2.85
6	3.10	4	3.05	5	3.11	4	3.11	6	2.99
7	3.12	5	3.06	4	3.09	5	3.12	8	3.08
5	3.07	7	3.11	6	3.14	9	3.28	10	3.12
4	3.03	6	3.08	7	3.19	7	3.24	4	2.89
8	3.21	8	3.13	8	3.21	10	3.33	15	3.28
9	3.53	15	3.58	17	3.56	18	3.72	21	3.62
10	3.55	12	3.52	10	3.37	11	3.36	13	3.20
13	3.61	9	3.38	11	3.42	15	3.49	11	3.18
12	3.59	11	3.44	17	3.56	14	3.45	12	3.19
14	3.68	17	3.63	12	3.48	16	3.56	16	3.50
10	3.55	13	3.55	16	3.55	12	3.41	7	3.06
16	3.74	13	3.55	14	3.52	17	3.70	18	3.57
18	3.78	18	3.67	14	3.52	12	3.41	14	3.22
15	3.70	16	3.61	12	3.48	8	3.26	9	3.11
16	3.74	10	3.40	9	3.33	6	3.22	5	2.93
19	3.87	21	3.81	22	3.84	23	3.92	19	3.58
21	3.91	20	3.80	20	3.75	19	3.78	20	3.61
19	3.87	19	3.74	19	3.71	21	3.84	27	3.88
22	3.95	21	3.81	21	3.77	20	3.80	22	3.66
23	4.00	23	3.90	24	3.99	26	4.03	30	4.08
26	4.07	29	4.12	24	3.99	31	4.20	24	3.96
24	4.01	24	3.99	23	3.94	24	3.97	23	3.68

Table 4

Problems by Annual Gross Receipts (continued)

Problem	Less Than $100* Rank	Less Than $100* Mean	$100-$199 Rank	$100-$199 Mean	$200-$349 Rank	$200-$349 Mean
Ability to Cost-Effectively Advertise	13	4.08	26	4.16	27	4.18
Cost of Outside Business Help	25	4.31	26	4.16	26	4.16
Finding Out About Regulatory Requirements	29	4.41	28	4.21	29	4.24
Poor Sales	20	4.20	31	4.35	30	4.26
Cost of Facilities (including Rent and/or Mortgage Costs)	24	4.30	25	4.14	28	4.23
Keeping Up on Business and Market Developments	30	4.44	30	4.31	32	4.28
Collecting Sales and/or Excise Taxes for Government	39	4.68	34	4.47	31	4.27
Low Worker Productivity	41	4.82	39	4.54	34	4.40
Obtaining Good Supervisory Personnel	52	5.12	42	4.71	33	4.38
Sales Too Dependent on Health of One Business or Industry	37	4.58	37	4.51	37	4.51
Locating Business Help When Needed	33	4.52	32	4.44	36	4.41
Sales Too Seasonal	27	4.37	34	4.47	42	4.57
Obtaining Long-Term Loans	33	4.52	33	4.45	34	4.40
Cost of Government Required Equipment/Procedures	48	5.05	44	4.72	44	4.61
Death (Estate) Taxes	44	4.92	42	4.71	39	4.54
Getting Useful Business Information	32	4.49	38	4.52	37	4.51
Pricing Goods/Services	40	4.71	41	4.61	40	4.56
Getting Information on Government Business Assistance Programs	35	4.54	36	4.50	43	4.59
Cost-Effective Mail Service	42	4.89	46	4.77	48	4.77

Table 4

Problems by Annual Gross Receipts
(Continued)

$350-$499*		$500-$749		$750-$1,499		$1,500- $2,999		$3,000 or More	
Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean
25	4.02	28	4.07	30	4.16	37	4.39	39	4.31
27	4.13	30	4.13	34	4.23	32	4.28	31	4.12
31	4.26	27	4.03	28	4.10	27	4.12	31	4.12
28	4.23	34	4.25	32	4.19	34	4.33	31	4.12
28	4.23	32	4.21	36	4.29	38	4.49	35	4.21
33	4.31	31	4.18	33	4.21	35	4.35	37	4.28
31	4.26	35	4.29	31	4.18	27	4.12	26	3.86
34	4.32	25	4.00	27	4.02	25	4.02	24	3.78
28	4.23	26	4.01	24	3.99	22	3.91	17	3.53
35	4.43	33	4.22	28	4.10	29	4.13	29	4.05
37	4.51	36	4.33	43	4.53	46	4.64	48	4.69
37	4.51	44	4.52	46	4.58	40	4.54	44	4.56
39	4.55	39	4.49	43	4.53	45	4.62	43	4.53
40	4.60	37	4.37	34	4.23	30	4.18	25	3.82
36	4.45	39	4.49	37	4.30	33	4.30	28	4.04
41	4.61	39	4.49	42	4.51	44	4.61	47	4.59
41	4.61	43	4.51	40	4.48	39	4.53	41	4.35
47	4.74	38	4.45	49	4.71	48	4.75	52	4.92
43	4.64	39	4.49	39	4.47	36	4.37	38	4.30

Table 4

Problems by Annual Gross Receipts
(continued)

	Less Than $100*		$100-$199		$200-$349	
Problem	Rank	Mean	Rank	Mean	Rank	Mean
Obtaining Short-Term Loans	38	4.60	40	4.58	40	4.56
Applications for Licenses, Permits, Etc.	43	4.91	47	4.91	47	4.74
Handling Business Growth	46	4.97	45	4.75	45	4.71
Controlling Inventory	51	5.09	48	4.93	46	4.73
Shoplifting, Pilferage, Bad Checks, etc.	48	5.05	49	4.97	49	4.82
Fair State/Local Inspections	53	5.18	53	5.12	51	5.03
Local Promotion of Local Business	45	4.95	51	5.02	50	4.98
Losing Skilled Employees to Large Firms	56	5.35	54	5.15	52	5.05
Obtaining Investor Financing	50	5.08	52	5.05	54	5.10
Locating Satisfactory Suppliers	47	5.02	50	4.99	53	5.07
Good Highways and Roads	52	5.16	56	5.24	56	5.17
Selling to the Federal Government	61	5.45	55	5.22	60	5.31
Fair Federal Inspection	65	5.50	66	5.41	61	5.32
Street Crime	60	5.38	57	5.28	58	5.22
Shortages of Materials, Goods, Fuel, etc.	54	5.34	59	5.29	55	5.13
Selling to State/Local Government	63	5.49	60	5.30	64	5.36
Anti-Competitive Practices, e.g. Price Fixing	58	5.36	60	5.30	59	5.23
Adequate Parking or Public Transportation	53	5.19	57	5.28	57	5.20
Shipping or Receiving Shipped Goods	54	5.34	62	5.35	65	5.39
Competition from Imported Products	63	5.47	64	5.39	66	5.41
Littered or Unattractive Business Area	56	5.35	65	5.40	61	5.32

Table 4

Problems by Annual Gross Receipts
(Continued)

$350-$499*		$500-$749		$750-$1,499		$1,500-$2,999		$3,000 or More	
Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean
46	4.73	46	4.62	47	4.66	50	4.90	51	4.84
47	4.74	45	4.56	40	4.48	42	4.55	36	4.27
45	4.70	47	4.64	45	4.57	40	4.54	42	4.41
44	4.66	47	4.64	38	4.44	42	4.55	34	4.18
49	4.83	49	4.67	50	4.75	48	4.75	45	4.57
50	4.86	50	4.78	48	4.67	47	4.65	40	4.34
51	4.94	52	4.96	55	5.11	59	5.20	64	5.36
53	5.07	51	4.80	51	4.91	53	5.01	53	4.97
52	5.03	54	5.03	55	5.11	55	5.09	60	5.23
55	5.17	60	5.15	57	5.13	61	5.28	59	5.20
59	5.28	56	5.06	57	5.13	54	5.07	53	4.97
54	5.12	53	5.02	52	5.01	52	4.98	50	4.81
57	5.19	58	5.10	54	5.08	51	4.93	46	4.57
56	5.18	59	5.11	57	5.13	57	5.17	57	5.07
62	5.32	61	5.18	60	5.14	58	5.18	58	5.14
58	5.22	55	5.05	53	5.07	56	5.15	55	5.00
60	5.29	57	5.08	61	5.21	63	5.37	60	5.23
61	5.30	62	5.24	67	5.40	66	5.43	65	5.37
63	5.34	63	5.25	62	5.24	65	5.38	63	5.27
65	5.39	66	5.36	63	5.29	63	5.37	56	5.02
63	5.34	65	5.33	66	5.37	67	5.46	66	5.46

Table 4

Problems by Annual Gross Receipts
(continued)

Problem	Less Than $100* Rank	Less Than $100* Mean	$100-$199 Rank	$100-$199 Mean	$200-$349 Rank	$200-$349 Mean
Police and Fire Protection	62	5.46	68	5.48	63	5.35
Poor Business Location	59	5.37	63	5.38	67	5.44
Employee (Labor) Unions	70	5.76	72	5.71	72	5.65
Competition from State or Local Government	66	5.60	67	5.47	69	5.57
Competition from Non-Profit Organizations, e.g. Universities	66	5.60	69	5.52	68	5.50
Competition from the Federal Government	68	5.67	70	5.61	71	5.62
Garbage Collection	69	5.71	71	5.68	70	5.60

becomes easier. Little could be farther from the truth. Problem severity was infrequently related directly to the rate of recent sales growth (decline), and even where such a pattern was discernible, it was usually rough (see Table 5).

Of the 72 problems presented for small business owner evaluation, only one resulted in a clear and strong direct relationship without at least one sales classification breaking the pattern. The problem, "Handling Business Growth," showed that firms experiencing 50% or more annual sales growth evaluated it as a serious difficulty. As sales growth fell, the problem became successively less severe until it reached its low point among those experiencing an annual sales decline of 10% or more.

A similar direct relationship was at least discernible in the evaluations of 9 other problems. However, only "Controlling My Own Time" was sufficiently strong to note. On that problem, severity also ascended with sales growth.

But a significant pattern did emerge. The relationship between problem severity and sales growth roughly resembled a bell-shaped curve among approximately half of the problems evaluated. Firm owners at the sales growth extremes (decrease 10% or more, increase 50% or more) evaluated problems similarily and as more severe than did those with more stable growth rates. For example, owners of small firms with sales decreasing 10% or more evaluated "Cash Flow" as 2.61 on average; as sales improved, the average evaluation showed

Table 4

Problems by Annual Gross Receipts
(Continued)

$350-$499*		$500-$749		$750-$1,499		$1,500-$2,999		$3,000 or More	
Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean
66	5.43	64	5.31	64	5.32	62	5.34	60	5.23
70	5.57	69	5.47	69	5.55	70	5.59	68	5.58
68	5.53	67	5.44	65	5.33	60	5.21	49	4.78
67	5.50	68	5.46	68	5.45	68	5.51	67	5.54
68	5.53	71	5.53	70	5.58	68	5.51	69	5.61
70	5.57	72	5.63	71	5.59	70	5.59	71	5.67
72	5.61	70	5.52	72	5.63	71	5.64	70	5.62

* Dollar figures in thousands (000's).

the problem becoming less severe (3.15, 3.22, and 3.33) until the sales change class "Increase 15-24%," where it peaked at 4.36; from that point, as sales changes continued to increase, the average evaluation fell until it bottomed at 2.94 in the sales change class "Increase 50% or More."

The bell-shaped curve was more often than not lopsided or in some other manner skewed. Usually, one leg of the curve was shorter than the other. For example, "Poor Earnings (Profits)" registered 2.56 and 3.28 in the two negatively growing classes, moving to a peak of 4.26, then falling to 3.94.

The bell-shaped curve phenomenon was particularly noticeable among problems one might loosely term "finance" problems. "Obtaining Short-Term Loans," "Obtaining Long-Term Loans," "Cash Flow," and "Obtaining Investor Financing" are four examples. Each produced the curve, and a rather steep curve at that.

The key element associated with problem severity was obviously not growth; the key element was change. Very rapidly growing firms and negatively growing firms, at least as measured by real sales volume change, experienced the most severe difficulties. Firms in the best position appeared to be those with stable to somewhat positive real sales growth.

Table 5

Severity of Small Business Problems by Sales Volume Change

	Decrease 10% or More		Decrease Less than 10%		Increase 5% or Less	
Problem	Rank	Mean	Rank	Mean	Rank	Mean
Interest Rates	1	2.40	2	2.91	1	2.87
Cost of Liability Insurance	5	2.69	2	2.91	3	2.98
Cost of Natural Gas, Gasoline, Fuel Oil	4	2.68	1	2.75	2	2.96
Telephone Rates (Costs)	7	2.94	7	3.20	4	3.04
Cash Flow	3	2.61	6	3.15	7	3.22
Cost of Property and Casualty Insurance	6	2.87	5	3.04	6	3.18
Electricity Rates (Costs)	8	2.96	4	3.03	5	3.05
Payroll Taxes	12	3.39	10	3.59	8	3.66
Poor Earnings (Profits)	2	2.56	8	3.28	9	3.52
Projecting Future Sales Changes	11	3.15	9	3.56	16	3.74
Federal Business Income Tax	13	3.42	14	3.68	10	3.59
Federal Paperwork	16	3.61	12	3.65	11	3.65
Highly Variable Earnings (Profits)	10	3.13	13	3.67	14	3.69
Unreasonable Government Regulations	23	3.81	10	3.59	12	3.66
Locating Qualified Employees	22	3.76	23	4.08	13	3.67
Delinquent Accounts; Customer Financing	14	3.53	18	3.90	18	3.79
Bad Debts and/or Bankruptcies	15	3.55	16	3.78	17	3.77
Employee Benefit Costs	21	3.73	21	3.96	15	3.70
Cost of Inventory/ Supplies	17	3.63	17	3.84	21	3.96
State/Local Paperwork	25	3.91	22	3.97	19	3.82
Competition from Large Businesses	20	3.72	14	3.68	20	3.91
Training Employees	30	4.09	31	4.41	21	3.96
Controlling My Own Time	33	4.17	24	4.17	26	4.14
Fixed Costs Too High	18	3.64	20	3.91	24	4.10
State Business Income Tax	24	3.87	25	4.18	23	4.00

Table 5

Problems by Sales Volume Change
(Continued)

Increase 5-14%		Increase 15-24%		Increase 25-49%		Increase 50% or More		Too New to Estimate	
Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean
1	2.87	1	3.01	1	2.77	1	2.74	1	2.86
2	2.98	2	3.15	2	3.13	3	3.08	3	3.18
3	3.02	4	3.41	6	3.38	7	3.50	6	3.51
5	3.16	3	3.23	3	3.17	4	3.16	5	3.33
7	3.33	6	4.36	4	3.20	2	2.94	2	2.95
6	3.22	7	3.47	5	3.33	6	3.35	4	3.29
4	3.12	8	3.51	7	3.41	9	3.58	7	3.61
8	3.36	5	3.45	9	3.54	5	3.28	11	3.76
19	3.92	25	4.26	20	3.94	22	3.94	7	3.61
14	3.74	12	3.68	8	3.52	11	3.60	9	3.71
9	3.58	11	3.66	10	3.60	10	3.59	13	3.84
10	3.60	10	3.60	13	3.73	15	3.72	25	4.23
17	3.82	18	3.94	15	3.79	12	3.64	10	3.75
12	3.73	14	3.73	20	3.94	18	3.83	12	3.78
12	3.73	9	3.55	10	3.60	7	3.50	21	4.11
15	3.75	15	3.82	12	3.67	13	3.65	20	4.10
16	3.76	17	3.85	14	3.74	20	3.84	28	4.21
11	3.70	12	3.68	15	3.79	14	3.68	24	4.30
21	3.94	21	4.07	22	3.96	24	4.04	14	3.91
18	3.84	19	3.95	19	3.90	21	3.88	27	4.29
23	4.03	22	4.09	23	3.98	27	4.09	16	4.01
22	3.96	16	3.83	17	3.80	17	3.81	22	4.18
19	3.92	20	3.96	18	3.85	16	3,75	17	4.05
26	4.21	32	4.44	26	4.16	30	4.23	17	4.05
24	4.06	24	4.24	29	4.25	26	4.07	31	4.34

Table 5

Severity of Small Business Problems
by Sales Volume Change

Problem	Decrease 10% or More		Decrease Less than 10%		Increase 5% or Less	
	Rank	Mean	Rank	Mean	Rank	Mean
Ability to Cost-Effectively Advertise	26	3.97	26	4.19	29	4.23
Cost of Outside Business Help	27	4.04	30	4.29	25	4.13
Finding Out About Regulatory Requirements	34	4.18	29	4.28	27	4.18
Poor Sales	9	3.09	18	3.90	28	4.21
Cost of Facilities (including Rent and/or Mortgage Costs)	28	4.06	33	4.43	34	4.34
Keeping Up on Business and Market Developments	35	4.24	32	4.42	31	4.25
Collecting Sales and/or Excise Taxes for Government	36	4.25	27	4.25	32	4.28
Low Worker Productivity	31	4.13	34	4.44	29	4.23
Obtaining Good Supervisory Personnel	39	4.37	39	4.62	33	4.31
Sales Too Dependent on Health of One Business or Industry	19	3.69	28	4.27	38	4.47
Locating Business Help When Needed	40	4.42	46	4.76	40	4.51
Sales Too Seasonal	28	4.06	37	4.55	44	4.59
Obtaining Long-Term Loans	32	4.15	43	4.72	37	4.46
Cost of Government Required Equipment/ Procedures	41	4.48	36	4.49	36	4.41
Death (Estate) Taxes	38	4.35	34	4.44	35	4.38
Getting Useful Business Information	42	4.50	41	4.69	39	4.49
Pricing Goods/Services	44	4.60	38	4.59	41	4.56
Getting Information on Government Business Assistance Programs	43	4.45	45	4.73	43	4.58
Cost-Effective Mail Service	46	4.69	47	4.81	42	4.57

Table 5

Problems by Sales Volume Change
(Continued)

Increase 5-14%		Increase 15-24%		Increase 25-49%		Increase 50% or More		Too New to Estimate	
Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean
26	4.21	29	4.35	34	4.30	23	3.98	14	3.91
29	4.24	28	4.34	30	4.26	25	4.05	23	4.20
25	4.14	27	4.33	25	4.14	32	4.24	32	4.35
47	4.70	48	4.94	41	4.50	48	4.81	26	4.28
31	4.32	30	4.36	28	4.22	30	4.23	17	4.05
30	4.30	31	4.38	32	4.28	32	4.24	33	4.38
28	4.22	35	4.51	35	4.34	43	4.60	40	4.65
32	4.36	26	4.27	31	4.27	40	4.50	41	4.71
32	4.36	23	4.12	24	4.12	28	4.11	49	4.96
40	4.62	41	4.68	33	4.29	39	4.43	34	4.41
34	4.49	38	4.57	38	4.40	32	4.24	36	4.48
42	4.67	42	4.72	40	4.49	41	4.51	34	4.41
45	4.68	44	4.76	39	4.47	29	4.20	29	4.31
35	4.52	37	4.56	42	4.52	44	4.64	47	4.93
35	4.52	40	4.65	47	4.68	46	4.68	49	4.96
37	4.57	39	4.62	36	4.37	35	4.26	30	4.33
37	4.57	36	4.55	37	4.38	37	4.39	39	4.61
42	4.67	44	4.76	43	4.59	36	4.36	38	4.53
37	4.57	34	4.50	48	4.69	42	4.54	48	4.95

Table 5

Problems by Sales Volume Change
(Continued)

Problem	Decrease 10% or More		Decrease Less than 10%		Increase 5% or Less	
	Rank	Mean	Rank	Mean	Rank	Mean
Obtaining Short-Term Loans	37	4.28	41	4.69	45	4.68
Applications for Licenses, Permits, Etc.	45	4.63	43	4.72	46	4.70
Handling Business Growth	53	4.95	50	4.93	50	4.90
Controlling Inventory	47	4.72	40	4.65	47	4.79
Shoplifting, Pilferage, Bad Checks, etc.	49	4.75	47	4.81	48	4.80
Fair State/Local Inspections	50	4.82	49	4.84	48	4.80
Local Promotion of Local Business	51	4.90	51	5.08	51	5.03
Losing Skilled Employees to Large Firms	52	4.91	58	5.23	52	5.06
Obtaining Investor Financing	48	4.74	57	5.21	57	5.16
Locating Satisfactory Suppliers	55	5.03	52	5.09	53	5.07
Good Highways and Roads	54	5.01	53	5.10	56	5.13
Selling to the Federal Government	56	5.04	56	5.17	58	5.19
Fair Federal Inspection	62	5.17	55	5.16	55	5.09
Street Crime	57	5.09	54	5.15	54	5.08
Shortages of Materials, Goods, Fuel, etc.	57	5.09	61	5.26	59	5.21
Selling to State/Local Government	61	5.11	59	5.24	62	5.27
Anti-Competitive Practices, e.g. Price Fixing	57	5.09	63	5.30	59	5.21
Adequate Parking or Public Transportation	67	5.38	65	5.37	61	5.24
Shipping or Receiving Shipped Goods	66	5.36	64	5.35	65	5.36
Competition from Imported Products	57	5.09	60	5.25	65	5.36
Littered or Unattractive Business Area	63	5.31	67	5.44	63	5.30

Table 5

Problems by Sales Volume Change
(Continued)

Increase 5-14%		Increase 15-24%		Increase 25-49%		Increase 50% or More		Too New to Estimate	
Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean
49	4.88	47	4.93	45	4.62	38	4.42	36	4.48
45	4.68	44	4.76	43	4.59	47	4.69	44	4.89
42	4.67	33	4.45	27	4.17	18	3.83	42	4.80
40	4.62	43	4.74	46	4.63	49	4.82	43	4.84
48	4.78	50	4.99	51	4.99	57	5.15	52	5.01
50	4.89	49	4.98	49	4.85	52	5.02	54	5.25
52	5.08	52	5.19	52	5.07	53	5.07	46	4.92
51	5.03	51	5.03	55	5.09	56	5.14	67	5.61
58	5.27	56	5.25	52	5.07	45	4.67	51	4.98
53	5.14	54	5.22	57	5.14	51	5.01	45	4.90
53	5.14	54	5.22	58	5.19	60	5.30	61	5.37
58	5.27	53	5.21	50	4.89	50	4.99	56	5.30
55	5.19	58	5.26	55	5.09	58	5.28	66	5.52
58	5.27	61	5.28	59	5.28	61	5.31	63	5.47
56	5.23	62	5.31	59	5.28	63	5.33	55	5.29
61	5.30	59	5.27	54	5.08	55	5.13	62	5.41
63	3.32	64	5.41	59	5.28	62	5.32	56	5.30
57	5.25	56	5.25	63	5.34	54	5.12	53	5.15
61	5.30	59	5.27	62	5.30	59	5.29	59	5.35
66	5.44	65	5.45	66	5.40	65	5.43	64	5.50
64	5.39	66	5.50	64	5.35	64	5.34	60	5.36

Table 5

Problems by Sales Volume Change
(Continued)

	Decrease 10% or More		Decrease Less than 10%		Increase 5% or Less	
Problem	Rank	Mean	Rank	Mean	Rank	Mean
Police and Fire Protection	65	5.33	62	5.29	64	5.34
Poor Business Location	64	5.32	66	5.43	69	5.43
Employee (Labor) Unions	68	5.41	67	5.44	67	5.42
Competition from State or Local Government	69	5.45	69	5.54	67	5.42
Competition from Non-Profit Organizations, e.g. Universities	70	5.51	71	5.62	70	5.49
Competition from the Federal Government	71	5.54	70	5.55	71	5.60
Garbage Collection	72	5.65	71	5.62	72	5.64

The owners of relatively new firms saw their problems neither as severe as did owners of older rapidly changing businesses nor as mild as those of older stable firms. Given the vulnerability of new firms and their expected life-spans at birth, the attitudes expressed are somewhat surprising.

Small Business Problems and Urbanization

There appeared to be little difference whether a small business was located in a metropolitan area, a small city, or in a rural setting (see Table 6). The small business owner tended to view the nature and severity of his problems in a similar manner. A few expected differences arose. For example, "Cost of Facilities (including Rent and/or Mortgage Costs)" was most difficult for firms in metropolitan areas; "Sales Too Seasonal" was just the opposite, reflecting rural America's dependence on the farm economy. However, no pattern emerged.

There was one major exception. Virtually all specific problems involving employees and employment were considered more severe by urban small businessmen and women than those in rural areas. Small entrepreneurs in small cities fell in between.

Two examples, "Locating Qualified Employees" and "Employee Benefit Costs," are illustrative. Small business owners in urban

Table 5

Problems by Sales Volume Change
(Continued)

Increase 5-14%		Increase 15-24%		Increase 25-49%		Increase 50% or More		Too New to Estimate	
Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean
65	5.41	63	5.40	65	5.37	68	5.54	65	5.51
70	5.54	71	5.64	67	5.50	67	5.51	58	5.31
69	5.52	67	5.52	68	5.51	66	5.44	70	5.74
67	5.51	68	5.58	70	5.62	69	5.55	71	5.79
68	5.52	69	5.59	69	5.60	71	5.59	69	5.72
72	5.63	70	5.62	72	5.69	72	5.75	72	5.86
71	5.61	72	5.69	71	5.63	69	5.55	68	5.70

areas evaluated the former as 3.49 on average (#10); those in small cities evaluated it as 3.74 (#15); and, those in rural areas as 3.95 (#19). "Employee Benefit Costs" demonstrated an even larger difference. It was judged to be 3.48 (#9), 3.76 (#17), and 4.05 (#22) respectively. "Worker Productivity," "Employee (Labor) Unions," and "Obtaining Good Supervisory Personnel" exhibited similar large differences. "Losing Skilled Employees to Larger Firms" and "Payroll Taxes" also exhibited differences, but they were substantially less.

Small Business Problems and the States

Small businesses have vastly more in common across the States than they have differences. A state-by-state review of small entrepreneur problem evaluations clearly illustrates those similarities (see Table 7). Most problems are rated in virtually identical manners regardless of state, and that is to be expected. All small businesses require similar inputs and are influenced in a similar fashion by the Federal government; there is also no evidence that the management skill level of entrepreneurs varies by state, and market conditions possess a national as well as a local flavor.

Table 6

Severity of Small Business Problems by Geographic Area

Problem	Metropolitan		Small City		Rural	
	Rank	Mean	Rank	Mean	Rank	Mean
Interest Rates	1	2.86	1	2.79	1	2.70
Cost of Liability Insurance	2	3.00	2	2.95	3	2.92
Cost of Natural Gas, Gasoline, Fuel Oil	6	3.30	4	3.06	2	2.79
Telephone Rates (Costs)	3	3.11	3	3.03	7	3.22
Cash Flow	4	3.17	5	3.12	6	3.10
Cost of Property and Casualty Insurance	5	3.27	6	3.18	5	3.06
Electricity Rates (Costs)	8	3.36	7	3.19	4	2.98
Payroll Taxes	7	3.35	8	3.40	9	3.56
Poor Earnings (Profits)	16	3.65	9	3.61	8	3.40
Projecting Future Sales Changes	12	3.53	10	3.62	10	3.60
Federal Business Income Tax	10	3.49	10	3.62	11	3.62
Federal Paperwork	14	3.61	12	3.67	12	3.68
Highly Variable Earnings (Profits)	13	3.58	13	3.70	12	3.68
Unreasonable Government Regulations	17	3.68	18	3.79	12	3.68
Locating Qualified Employees	10	3.49	15	3.74	19	3.95
Delinquent Accounts; Customer Financing	15	3.62	15	3.74	17	3.87
Bad Debts and/or Bankruptcies	19	3.77	14	3.72	16	3.82
Employee Benefit Costs	9	3.48	17	3.76	22	4.05
Cost of Inventory/ Supplies	23	4.02	19	3.90	15	3.77
State/Local Paperwork	21	3.89	20	3.93	18	3.90
Competition from Large Businesses	20	3.88	20	3.93	21	3.98
Training Employees	18	3.75	22	4.01	28	4.24
Controlling My Own Time	22	3.97	23	4.04	23	4.07
Fixed Costs Too High	26	4.12	26	4.14	19	3.95
State Business Income Tax	25	4.06	24	4.09	24	4.11
Ability to Cost-Effectively Advertise	32	4.24	24	4.09	26	4.22

Table 6

Problems by Geographic Area
(Continued)

Problem	Metropolitan		Small City		Rural	
	Rank	Mean	Rank	Mean	Rank	Mean
Cost of Outside Business Help	27	4.13	27	4.20	29	4.26
Finding Out About Regulatory Requirements	30	4.21	29	4.24	25	4.15
Poor Sales	30	4.21	30	4.26	26	4.22
Cost of Facilities (including Rent and/or Mortgage Costs)	28	4.15	28	4.21	34	4.41
Keeping Up on Business and Market Developments	33	4.32	33	4.33	29	4.26
Collecting Sales and/or Excise Taxes for Government	33	4.32	32	4.31	32	4.31
Low Worker Productivity	28	4.15	31	4.27	40	4.54
Obtaining Good Supervisory Personnel	24	4.04	34	4.34	44	4.66
Sales Too Dependent on Health of One Business or Industry	35	4.33	35	4.41	31	4.30
Locating Business Help When Needed	40	4.53	36	4.49	37	4.50
Sales Too Seasonal	45	4.66	37	4.50	33	4.37
Obtaining Long-Term Loans	36	4.44	38	4.51	42	4.56
Cost of Government Required Equipment/ Procedures	37	4.50	41	4.59	35	4.45
Death (Estate) Taxes	43	4.59	40	4.53	36	4.48
Getting Useful Business Information	42	4.55	38	4.51	39	4.54
Pricing Goods/Services	37	4.50	44	4.62	38	4.53
Getting Information on Government Business Assistance Programs	47	4.70	42	4.61	42	4.57
Cost-Effective Mail Service	40	4.53	42	4.61	47	4.78
Obtaining Short-Term Loans	43	4.59	45	4.64	46	4.77

Table 6

Problems by Geographic Area (Continued)

Problem	Metropolitan		Small City		Rural	
	Rank	Mean	Rank	Mean	Rank	Mean
Applications for Licenses, Permits, Etc.	46	4.66	46	4.73	44	4.66
Handling Business Growth	39	4.51	48	4.74	48	4.81
Controlling Inventory	48	4.73	46	4.73	43	4.65
Shoplifting, Pilferage, Bad Checks, etc.	52	4.94	49	4.81	49	4.82
Fair State/Local Inspections	49	4.83	50	4.92	51	4.92
Local Promotion of Local Business	57	5.19	53	5.07	50	4.91
Losing Skilled Employees to Large Firms	53	4.97	51	5.04	57	5.21
Obtaining Investor Financing	55	5.08	52	5.05	54	5.15
Locating Satisfactory Suppliers	58	5.21	54	5.12	53	4.97
Good Highways and Roads	62	5.30	56	5.21	52	4.95
Selling to the Federal Government	50	4.93	55	5.18	62	5.34
Fair Federal Inspections	56	5.14	60	5.27	55	5.16
Street Crime	50	4.93	58	5.25	65	5.43
Shortages of Materials, Goods, Fuel, etc.	60	5.26	57	5.22	56	5.20
Selling to State/Local Government	54	5.04	58	5.25	64	5.40
Anti-Competitive Practices, e.g. Price Fixing	64	5.33	60	5.27	57	5.21
Adequate Parking or Public Transportation	59	5.22	62	5.28	62	5.34
Shipping or Receiving Shipped Goods	67	5.40	63	5.33	59	5.23
Competition from Imported Products	64	5.33	65	5.45	59	5.23
Littered or Unattractive Business Area	61	5.29	64	5.39	66	5.44
Police and Fire Protection	66	5.35	67	5.49	61	5.25

Table 6

Problems by Geographic Area
(Continued)

Problem	Metropolitan Rank	Metropolitan Mean	Small City Rank	Small City Mean	Rural Rank	Rural Mean
Poor Business Location	68	5.53	66	5.46	67	5.45
Employee (Labor) Unions	62	5.30	67	5.49	71	5.66
Competition from State or Local Government	68	5.53	69	5.52	68	5.53
Competition from Non-Profit Organizations, e.g. Universities	70	5.58	70	5.55	69	5.54
Competition from the Federal Government	72	5.63	71	5.65	70	5.57
Garbage Collection	71	5.60	72	5.66	71	5.66

There are differences by state, however. Some of these differences are probably related to geography and economic base. For example, small business owners in Florida judged "Cost of Natural Gas, Gasoline, Fuel Oil" as 3.51 for a #9 ranking; small business owners in Pennsylvania, on the other hand, provided a 2.84 mean and those in Illinois a 2.58 mean, both #1 rankings. Warmer weather and the relatively small use of natural gas for industrial processing are reasonable explanations for Florida small entrepreneurs being less concerned with fossil fuel prices than Pennsylvania and Illinois small entrepreneurs.

A second set of differences, though, are directly related to phenomena over which states control or substantially influence. The most obvious example of this nature is "State Business Income Tax". State-by-state ranges were extreme on this possible problem. Michigan small entrepreneurs gave the problem an average score of 2.95 for a #4 ranking, and Minnesota small entrepreneurs were only slightly less sanguine (3.31 for a #7). Texans, without such a tax, in contrast registered an average score of 5.68 for a #71. Oregon provides yet another example. Without a state sales tax, small business owners in Oregon evaluated "Collecting Sales and/or Excise Taxes for Government" as 5.39 average, ranking it #65. Their counterparts in New York provided the problem a 3.96 (#22) and in neighboring Washington a 4.04 (#20).

A third set of state-by-state differences falls in that gray area between phenomena over which a State has almost total control and those over which a state has no control. For example, a trained

Table 7

Severity of Small Business Problems
by Selected States

Problem	California		Colorado		Florida		Illinois		Indiana	
	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean
Interest Rates	2	3.11	1	2.94	2	2.92	3	2.79	1	2.40
Cost of Liability Insurance	1	2.94	2	3.08	1	2.88	2	2.74	3	2.81
Cost of Natural Gas, Gasoline, Fuel Oil	5	3.25	3	3.09	9	3.51	1	2.58	2	2.68
Telephone Rates (Costs)	3	3.18	6	3.37	4	3.16	7	3.24	4	2.86
Cash Flow	6	3.28	4	3.29	8	3.28	6	2.98	7	3.23
Cost of Property and Casualty Insurance	3	3.18	5	3.32	5	3.19	4	2.84	6	3.05
Electricity Rates (Costs)	7	3.30	7	3.42	3	3.09	4	2.84	4	2.86
Payroll Taxes	10	3.55	14	3.86	6	3.24	8	3.34	8	3.39
Poor Earnings (Profits)	12	3.65	12	3.77	17	3.81	9	3.36	9	3.51
Projecting Future Sales Changes	13	3.69	8	3.59	10	3.54	10	3.58	11	3.54
Federal Business Income Tax	9	3.52	9	3.71	15	3.75	17	3.81	10	3.52
Federal Paperwork	15	3.73	13	3.79	11	3.61	13	3.72	14	3.66
Highly Variable Earnings (Profits)	11	3.63	10	3.75	13	3.72	13	3.72	13	3.58
Unreasonable Government Regulations	15	3.73	10	3.75	11	3.61	18	3.86	12	3.57
Locating Qualified Employees	8	3.49	16	3.88	7	3.26	22	4.01	20	3.97
Delinquent Accounts; Customer Financing	17	3.80	17	3.92	21	3.96	11	3.68	21	3.99
Bad Debts and/or Bankruptcies	21	3.85	14	3.86	22	3.91	12	3.70	15	3.75
Employee Benefit Costs	14	3.70	19	4.04	21	3.90	21	3.91	17	3.80
Cost of Inventory/ Supplies	22	3.97	18	4.01	23	3.96	16	3.78	15	3.75
State/Local Paperwork	18	3.81	20	4.06	25	4.05	20	3.89	23	4.09
Competition from Large Businesses	23	3.99	23	4.19	18	3.83	15	3.75	18	3.83
Training Employees	19	3.84	26	4.26	14	3.73	25	4.13	32	4.31
Controlling My Own Time	24	4.05	27	4.27	15	3.75	24	4.05	24	4.14
Fixed Costs Too High	28	4.14	22	4.16	25	4.05	19	3.87	22	4.01
State Business Income Tax	19	3.84	29	4.39	49	4.79	25	4.13	19	3.93
Ability to Cost-Effectively Advertise	26	4.11	24	4.20	29	4.16	30	4.39	25	4.15

Table 7

Problems by Selected States
(Continued)

Problem	California		Colorado		Florida		Illinois		Indiana	
	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean
Cost of Outside Business Help	27	4.12	31	4.45	27	4.06	30	4.39	26	4.18
Finding Out About Regulatory Requirements	31	4.19	21	4.13	28	4.12	27	4.26	30	4.29
Poor Sales	33	4.24	36	4.53	37	4.44	23	4.04	26	4.18
Cost of Facilities (including Rent and/or Mortgage Costs)	29	4.15	32	4.46	31	4.34	28	4.28	35	4.41
Keeping Up on Business and Market Developments	37	4.37	32	4.46	33	4.38	30	4.39	33	4.37
Collecting Sales and/or Excise Taxes for Government	25	4.10	27	4.27	39	4.50	34	4.52	26	4.18
Low Worker Productivity	32	4.20	44	4.70	20	3.85	29	4.35	31	4.30
Obtaining Good Supervisory Personnel	30	4.18	37	4.59	19	3.84	33	4.41	33	4.37
Sales Too Dependent on Health of One Business or Industry	35	4.31	24	4.20	32	4.37	39	4.63	29	4.19
Locating Business Help When Needed	39	4.42	43	4.69	30	4.24	42	4.66	44	4.86
Sales Too Seasonal	43	4.59	30	4.43	45	4.61	36	4.56	37	4.46
Obtaining Long-Term Loans	34	4.29	34	4.48	33	4.38	47	4.86	39	4.55
Cost of Government Required Equipment/ Procedures	40	4.49	40	4.68	43	4.58	35	4.55	36	4.44
Death (Estate) Taxes	36	4.36	38	4.63	48	4.68	37	4.58	41	4.61
Getting Useful Business Information	42	4.54	35	4.52	41	4.51	40	4.64	40	4.59
Pricing Goods/Services	44	4.60	39	4.66	36	4.40	38	4.62	38	4.49
Getting Information on Government Business Assistance Programs	45	4.64	40	4.68	40	4.50	48	4.89	43	4.67
Cost-Effective Mail Service	46	4.71	40	4.68	38	4.46	44	4.76	48	4.80
Obtaining Short-Term Loans	38	4.39	46	4.76	44	4.59	51	4.98	47	4.78

Table 7

Problems by Selected States
(Continued)

Problem	California		Colorado		Florida		Illinois		Indiana	
	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean
Applications for Licenses, Permits, Etc.	41	4.51	48	4.90	41	4.51	46	4.82	46	4.72
Handling Business Growth	46	4.71	45	4.74	33	4.38	44	4.76	48	4.80
Controlling Inventory	50	4.76	47	4.79	47	4.67	43	4.67	45	4.70
Shoplifting, Pilferage, Bad Checks, etc.	48	4.74	52	5.03	46	4.65	49	4.93	50	4.80
Fair State/Local Inspections	48	4.74	51	4.98	52	4.88	50	4.97	41	4.61
Local Promotion of Local Business	55	5.13	50	4.97	58	5.14	52	5.03	51	4.92
Losing Skilled Employees to Large Firms	53	5.07	56	5.25	49	4.79	54	5.08	54	5.05
Obtaining Investor Financing	51	4.96	53	5.04	53	4.97	66	5.45	61	5.21
Locating Satisfactory Suppliers	53	5.07	54	5.22	56	5.09	53	5.07	58	5.18
Good Highways and Roads	65	5.37	49	4.96	60	5.21	40	4.64	52	4.95
Selling to the Federal Government	59	5.20	60	5.38	54	4.99	55	5.18	57	5.13
Fair Federal Inspection	58	5.18	57	5.27	58	5.14	60	5.32	54	5.05
Street Crime	52	5.03	59	5.31	51	4.82	62	5.36	59	5.19
Shortages of Materials, Goods, Fuel, etc.	57	5.16	58	5.30	61	5.24	56	5.20	59	5.19
Selling to State/Local Government	60	5.25	64	5.47	55	5.03	61	5.35	53	5.01
Anti-Competitive Practices, e.g. Price Fixing	62	5.33	63	5.45	57	5.13	58	5.29	62	5.36
Adequate Parking or Public Transportation	56	5.15	62	5.43	63	5.29	59	5.30	69	5.54
Shipping or Receiving Shipped Goods	66	5.41	55	5.24	64	5.30	63	5.37	65	5.42
Competition from Imported Products	66	5.41	65	5.41	65	5.35	57	5.23	67	5.49
Littered or Unattractive Business Area	63	5.35	60	5.38	66	5.40	63	5.37	65	5.42
Police and Fire Protection	60	5.25	66	5.59	62	5.26	67	5.47	64	5.37
Poor Business Location	68	5.46	69	5.68	67	5.47	68	5.50	62	5.36

Table 7

Problems by Selected States
(Continued)

Problem	California		Colorado		Florida		Illinois		Indiana	
	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean
Employee (Labor) Unions	63	5.35	70	5.70	71	5.69	65	5.39	56	5.10
Competition from State or Local Government	69	5.56	67	5.61	69	5.58	71	5.54	72	5.66
Competition from Non-Profit Organizations, e.g. Universities	70	5.59	71	5.79	72	5.72	68	5.50	68	5.52
Competition from the Federal Government	72	5.67	68	5.64	70	5.64	70	5.52	71	5.65
Garbage Collection	71	5.63	72	5.81	68	5.56	72	5.75	70	5.57

Table 7a

Problems by Selected States
(Continued)

Problem	Iowa		Michigan		Minnesota		New York		Ohio	
	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean
Interest Rates	1	2.48	2	2.77	1	2.54	3	2.94	1	2.73
Cost of Liability Insurance	4	2.99	1	2.74	3	2.98	2	2.85	6	3.21
Cost of Natural Gas, Gasoline, Fuel Oil	2	2.73	2	2.77	2	2.97	1	2.71	2	2.78
Telephone Rates (Costs)	8	3.21	8	3.07	5	3.16	6	3.15	5	3.10
Cash Flow	3	2.87	6	3.01	4	3.02	7	3.16	3	3.02
Cost of Property and Casualty Insurance	5	3.04	5	2.99	6	3.25	4	3.07	9	3.43
Electricity Rates (Costs)	5	3.04	7	3.03	14	3.58	5	3.08	4	3.04
Payroll Taxes	9	3.40	10	3.35	8	3.41	15	3.72	7	3.36
Poor Earnings (Profits)	7	3.18	9	3.17	9	3.46	8	3.61	8	3.42
Projecting Future Sales Changes	14	3.62	12	3.52	13	3.57	8	3.61	11	3.54
Federal Business Income Tax	17	3.80	11	3.49	11	3.52	11	3.66	10	3.46
Federal Paperwork	13	3.60	14	3.68	11	3.52	20	3.92	12	3.56
Highly Variable Earnings (Profits)	12	3.59	13	3.58	10	3.48	17	3.81	13	3.57

Table 7a

Problems by Selected States
(Continued)

Problem	Iowa		Michigan		Minnesota		New York		Ohio	
	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean
Unreasonable Government Regulations	16	3.67	20	3.90	17	3.61	18	3.82	16	3.76
Locating Qualified Employees	31	4.28	22	3.96	26	4.12	10	3.65	19	3.89
Delinquent Accounts; Customer Financing	10	3.54	16	3.74	15	3.59	21	3.94	17	3.79
Bad Debts and/or Bankruptcies	10	3.54	16	3.74	18	3.74	24	4.05	18	3.87
Employee Benefit Costs	22	3.91	15	3.69	19	3.80	12	3.67	14	3.60
Cost of Inventory/ Supplies	15	3.63	19	3.85	25	4.09	16	3.75	23	4.04
State/Local Paperwork	19	3.85	18	3.79	16	3.60	14	3.69	20	3.91
Competition from Large Businesses	20	3.86	30	4.25	21	3.93	25	4.08	21	3.92
Training Employees	36	4.40	25	4.03	31	4.23	19	3.89	25	4.07
Controlling My Own Time	18	3.84	27	4.11	20	3.86	26	4.13	23	4.04
Fixed Costs Too High	21	3.87	23	3.97	24	4.08	23	4.01	28	4.22
State Business Income Tax	24	4.04	4	2.95	7	3.31	13	3.68	15	3.71
Ability to Cost-Effectively Advertise	29	4.26	29	4.23	27	4.18	27	4.22	30	4.25
Cost of Outside Business Help	27	4.10	21	3.29	31	4.23	28	4.24	22	4.00
Finding Out About Regulatory Requirements	28	4.23	32	4.31	22	4.02	29	4.26	29	4.24
Poor Sales	23	4.02	26	4.06	30	4.22	32	4.46	26	4.10
Cost of Facilities (including Rent and/or Mortgage Costs)	39	4.53	28	4.17	29	4.21	30	4.32	32	4.34
Keeping Up on Business and Market Developments	25	4.06	31	4.27	23	4.07	32	4.46	27	4.21
Collecting Sales and/or Excise Taxes for Government	33	4.36	43	4.69	28	4.19	22	3.96	35	4.38
Low Worker Productivity	40	4.55	39	4.48	40	4.59	32	4.46	31	4.32
Obtaining Good Supervisory Personnel	47	4.81	42	4.61	45	4.75	31	4.39	34	4.35
Sales Too Dependent on Health of One Business or Industry	26	4.09	24	4.02	34	4.43	36	4.54	38	4.57

Table 7a

Problems by Selected States
(Continued)

Problem	Iowa		Michigan		Minnesota		New York		Ohio	
	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean
Locating Business Help When Needed	40	4.55	40	4.52	44	4.73	38	4.57	44	4.68
Sales Too Seasonal	32	4.35	33	4.41	39	4.53	35	4.50	41	4.63
Obtaining Long-Term Loans	35	4.39	35	4.44	40	4.59	41	4.66	32	4.34
Cost of Government Required Equipment/ Procedures	34	4.38	35	4.44	37	4.51	39	4.59	45	4.72
Death (Estate) Taxes	30	4.27	35	4.44	37	4.51	39	4.59	37	4.47
Getting Useful Business Information	38	4.48	34	4.42	33	4.42	44	4.73	42	4.64
Pricing Goods/Services	44	4.63	45	4.72	35	4.45	37	4.55	38	4.57
Getting Information on Government Business Assistance Programs	42	4.61	38	4.45	36	4.50	43	4.72	43	4.67
Cost-Effective Mail Service	42	4.61	49	4.94	40	4.59	47	4.78	47	4.83
Obtaining Short-Term Loans	45	4.76	41	4.56	47	4.80	42	4.70	36	4.41
Applications for Licenses, Permits, etc.	47	4.81	44	4.70	48	4.87	45	4.74	48	4.85
Handling Business Growth	46	4.77	50	4.95	43	4.65	48	4.80	40	4.59
Controlling Inventory	37	4.46	46	4.79	46	4.77	46	4.76	46	4.77
Shoplifting, Pilferage, Bad Checks, etc.	52	5.08	47	4.83	51	5.07	50	5.03	51	5.02
Fair State/Local Inspections	49	4.93	48	4.84	50	4.95	48	4.80	49	4.87
Local Promotion of Local Business	50	5.04	51	4.99	49	4.90	52	5.07	53	5.12
Losing Skilled Employees to Large Firms	56	5.29	59	5.23	57	5.23	53	5.15	50	5.01
Obtaining Investor Financing	53	5.09	53	5.08	52	5.10	64	5.34	51	5.02
Locating Satisfactory Suppliers	55	5.19	55	5.15	53	5.12	56	5.23	59	5.31
Good Highways and Roads	51	5.07	57	5.18	56	5.19	60	5.28	61	5.35
Selling to the Federal Government	59	5.35	55	5.15	55	5.18	59	5.26	54	5.14
Fair Federal Inspection	54	5.18	58	5.20	54	5.15	55	5.18	57	5.29
Street Crime	61	5.37	52	5.06	67	5.44	62	5.30	55	5.22

Table 7a

Problems by Selected States
(Continued)

Problem	Iowa		Michigan		Minnesota		New York		Ohio	
	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean
Shortages of Materials, Goods, Fuel, etc.	56	5.29	60	5.26	59	5.30	56	5.23	56	5.28
Selling to State/Local Government	64	5.43	61	5.27	58	5.25	56	5.23	62	5.36
Anti-Competitive Practices, e.g. Price Fixing	58	5.30	54	5.11	59	5.30	63	5.31	57	5.29
Adequate Parking or Public Transportation	59	5.35	65	5.36	63	5.36	54	5.16	64	5.42
Shipping or Receiving Shipped Goods	62	5.38	66	5.40	66	5.40	65	5.37	69	5.54
Competition from Imported Products	63	5.42	63	5.30	61	5.33	51	5.04	65	5.43
Littered or Unattractive Business Area	68	5.62	62	5.29	64	5.39	61	5.29	63	5.41
Police and Fire Protection	66	5.54	68	5.47	70	5.56	66	5.41	66	5.46
Poor Business Location	69	5.64	67	5.42	69	5.48	67	5.43	67	5.52
Employee (Labor) Unions	67	5.58	64	5.32	62	5.34	69	5.50	60	5.34
Competition from State or Local Government	70	5.65	70	5.65	68	5.45	68	5.46	68	5.53
Competition from Non-Profit Organizations, e.g. Universities	65	5.48	69	5.48	64	5.39	70	5.54	70	5.55
Competition from the Federal Government	71	5.68	71	5.69	71	5.57	71	5.58	71	5.62
Garbage Collection	72	5.83	72	5.73	72	5.80	72	5.61	72	5.79

Table 7b

Problems by Selected States
(Continued)

Problem	Oregon		Pennsylvania		Texas		Washington		Wisconsin	
	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean
Interest Rates	1	2.74	3	2.88	2	2.82	1	2.86	1	2.58
Cost of Liability Insurance	5	3.16	1	2.84	1	2.79	5	3.42	4	3.01

Table 7b

Problems by Selected States
(Continued)

Problem	Oregon Rank	Oregon Mean	Pennsylvania Rank	Pennsylvania Mean	Texas Rank	Texas Mean	Washington Rank	Washington Mean	Wisconsin Rank	Wisconsin Mean
Cost of Natural Gas, Gasoline, Fuel Oil	6	3.25	1	2.84	7	3.32	6	3.52	2	2.68
Telephone Rates (Costs)	2	2.95	6	3.17	3	3.06	3	3.28	6	3.06
Cash Flow	4	3.12	7	3.18	6	3.28	2	3.12	5	3.04
Cost of Property and Casualty Insurance	9	3.34	4	3.08	3	3.06	8	3.56	7	3.28
Electricity Rates (Costs)	8	3.31	5	3.10	5	3.11	8	3.56	3	3.00
Payroll Taxes	3	3.09	8	3.44	8	3.34	4	3.35	15	3.69
Poor Earnings (Profits)	7	3.30	10	3.63	19	3.87	8	3.56	8	3.44
Projecting Future Sales Changes	18	3.65	11	3.68	11	3.62	11	3.61	13	3.59
Federal Business Income Tax	10	3.37	13	3.71	12	3.65	16	3.73	11	3.57
Federal Paperwork	11	3.46	14	3.75	10	3.60	17	3.76	10	3.50
Highly Variable Earnings (Profits)	12	3.47	15	3.79	16	3.79	6	3.52	11	3.57
Unreasonable Government Regulations	13	3.55	18	3.87	14	3.77	14	3.66	9	3.49
Locating Qualified Employees	22	3.90	25	4.12	9	3.49	21	4.05	22	3.98
Delinquent Accounts; Customer Financing	16	3.59	20	3.91	17	3.81	12	3.65	19	3.90
Bad Debts and/or Bankruptcies	13	3.55	27	4.16	15	3.78	12	3.65	19	3.90
Employee Benefit Costs	16	3.59	16	3.83	19	3.87	15	3.68	14	3.62
Cost of Inventory/Supplies	24	3.93	17	3.84	22	4.01	22	4.16	18	3.89
State/Local Paperwork	18	3.65	12	3.69	26	4.17	17	3.76	15	3.69
Competition from Large Businesses	21	3.84	19	3.90	21	3.90	19	4.03	23	4.01
Training Employees	28	4.07	29	4.26	12	3.65	24	4.17	23	4.01
Controlling My Own Time	25	4.01	23	4.10	17	3.81	22	4.16	34	4.32
Fixed Costs Too High	23	3.91	22	4.08	25	4.13	28	4.21	21	3.92
State Business Income Tax	20	3.74	9	3.57	71	5.68	43	4.70	17	3.79
Ability to Cost-Effectively Advertise	32	4.31	21	3.97	27	4.22	26	4.19	25	4.04

Table 7b

Problems by Selected States
(Continued)

	Oregon		Pennsylvania		Texas		Washington		Wisconsin	
Problem	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean
Cost of Outside Business Help	26	4.02	31	4.29	28	4.23	30	4.29	29	4.17
Finding Out About Regulatory Requirements	27	4.06	23	4.10	31	4.30	29	4.26	26	4.05
Poor Sales	29	4.10	36	4.46	33	4.45	27	4.20	27	4.10
Cost of Facilities (including Rent and/or Mortgage Costs)	30	4.11	30	4.27	29	4.25	30	4.29	33	4.28
Keeping Up on Business and Market Developments	31	4.18	26	4.15	32	4.36	36	4.45	31	4.24
Collecting Sales and/or Excise Taxes for Government	65	5.39	28	4.21	34	4.47	20	4.04	30	4.18
Low Worker Productivity	35	4.43	41	4.69	23	4.10*	35	4.44	34	4.32
Obtaining Good Supervisory Personnel	41	4.57	46	4.77	24	4.12	33	4.42	36	4.40
Sales Too Dependent on Health of One Business or Industry	15	3.58	44	4.74	34	4.47	25	4.18	44	4.64
Locating Business Help When Needed	39	4.49	37	4.47	30	4.29	42	4.69	41	4.57
Sales Too Seasonal	36	4.44	34	4.41	45	4.75	34	4.43	37	4.42
Obtaining Long-Term Loans	33	4.39	42	4.72	36	4.49	32	4.32	43	4.61
Cost of Government Required Equipment/ Procedures	34	4.41	46	4.77	40	4.56	40	4.64	28	4.16
Death (Estate) Taxes	45	4.67	39	4.54	43	4.72	47	4.76	32	4.26
Getting Useful Business Information	37	4.48	31	4.29	36	4.49	41	4.67	40	4.54
Pricing Goods/Services	47	4.86	35	4.44	38	4.53	39	4.59	42	4.59
Getting Information on Government Business Assistance Programs	37	4.48	33	4.40	48	4.84	46	4.74	38	4.47
Cost-Effective Mail Service	43	4.62	46	4.77	41	4.59	38	4.56	45	4.66
Obtaining Short-Term Loans	42	4.61	42	4.72	46	4.80	37	4.49	48	4.68
Applications for Licenses, Permits, etc.	40	4.51	38	4.49	47	4.81	44	4.71	45	4.66

Table 7b

Problems by Selected States
(Continued)

Problem	Oregon		Pennsylvania		Texas		Washington		Wisconsin	
	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean
Handling Business Growth	48	4.89	45	4.75	38	4.53	45	4.72	50	4.93C
ontrolling Inventory	50	4.98	49	4.79	42	4.65	49	4.91	39	4.52
Shoplifting, Pilferage, Bad Checks, etc.	49	4.96	51	5.01	44	4.74	50	4.97	49	4.90
Fair State/Local Inspections	44	4.64	50	4.96	50	5.03	48	4.86	47	4.67
Local Promotion of Local Business	46	4.82	56	5.10	59	5.30	53	5.04	52	5.04
Losing Skilled Employees to Large Firms	52	5.16	54	5.07	49	4.89	58	5.25	55	5.10
Obtaining Investor Financing	59	5.32	58	5.18	52	5.09	51	5.02	55	5.10
Locating Satisfactory Suppliers	58	5.31	51	5.01	50	5.03	55	5.21	52	5.04
Good Highways and Roads	52	5.16	40	4.67	59	5.30	61	5.27	57	5.13
Selling to the Federal Government	59	5.32	55	5.09	56	5.21	51	5.02	59	5.25
Fair Federal Inspection	54	5.18	60	5.21	55	5.20	55	5.21	51	5.01
Street Crime	65	5.39	65	5.44	54	5.19	64	5.33	65	5.51
Shortages of Materials, Goods, Fuel, etc.	63	5.34	53	5.05	61	5.31	59	5.26	63	5.37
Selling to State/Local Government	55	5.27	59	5.19	57	5.26	54	5.17	62	5.32
Anti-Competitive Practices, e.g. Price Fixing	51	5.03	57	5.17	63	5.34	55	5.21	54	5.06
Adequate Parking or Public Transportation	56	5.28	62	5.38	57	5.26	62	5.28	58	5.23
Shipping or Receiving Shipped Goods	64	5.37	64	5.41	53	5.18	63	5.31	59	5.25
Competition from Imported Products	62	5.33	61	5.34	65	6.41	68	5.44	61	5.29
Littered or Unattractive Business Area	67	5.40	67	5.51	64	5.37	67	5.39	72	5.66
Police and Fire Protection	59	5.32	65	5.44	62	6.32	65	5.34	66	5.54
Poor Business Location	68	5.42	63	5.39	67	5.54	69	5.47	64	5.38
Employee (Labor) Unions	70	5.45	70	5.58	70	5.66	66	5.36	69	5.57
Competition from State or Local Government	57	5.30	69	5.54	69	5.58	59	5.26	68	5.56

Table 7b

Problems by Selected States
(Continued)

	Oregon		Pennsylvania		Texas		Washington		Wisconsin	
Problem	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean
Competition from Non-Profit Organizations, e.g. Universities	68	5.42	71	5.59	67	5.54	71	5.51	66	5.54
Competition from the Federal Government	71	5.63	68	5.53	72	5.74	70	5.49	71	5.63
Garbage Collection	72	5.70	72	5.80	66	5.53	72	5.72	70	5.61

labor force is a function of the state education system, the demand for labor, etc., etc. "Locating Qualified Employees" as a small business problem, however, finds a curious mixture of small business owner evaluations on a state-by-state basis that probably reflects the problem's multi-dimensionality. Small entrepreneurs in California (3.49 for a #8) and New York (3.65 for a #10), both of which enjoy reputations as having strong education systems, reported locating qualified employees as a difficult problem; so did small businessmen and women in Florida (3.26 for a #7) and Texas (3.49 for a #9), states which do not share the reputation of the prior two. At the other end of the scale, Iowa (4.28 for a #31), Minnesota (4.12 for a #26) and Illinois (4.01 for a #22) found the problem of substantially smaller concern.

Conclusion

Each business owner finds himself in a unique position. While his firm may be affected by one problem in virtually an identical manner to another, it is the combinations of problem and problem severity, at least in part stemming from unique operating environments and unique entrepreneurial personalities, that create differences. But despite the uniqueness of each, there are broadly shared conditions and concerns. These conditions and concerns can often, and sometimes should, be addressed on a group basis in the form of public policy initiatives. The problems and their severity identified in this report should help establish small business public policy priorities.

UPDATED NFIB TELEPHONE USAGE SURVEY

Q1. Do you own your telephones?

A.	No Reply	.5%
	Yes	38.0%
	No	61.5%

Q2. How many telephone lines (different numbers) do you have coming into your business?

A.	No Reply	.2%
	One	37.8%
	2-3	42.8%
	4-6	14.0%
	7 or more	5.3%

Q3. Do you use any non-conventional means, such as MCI, Sprint, WATTS, etc., to make your long-distance calls?

A.	No Reply	.5%
	Yes	25.1%
	No	74.4%

Q4. In a normal month, do you and your employees make more long-distance or more local calls?

A.	No Reply	.5%
	More long-distance	22.3%
	More local	63.0%
	About the same	14.3%

Q5. Do you send or receive computer data over your telephones?

A.	No Reply	1.4%
	Yes	13.5%
	No	85.0%

Q6. Estimate the number of business calls made daily.

A.	No Reply	1.8%
	1-9	18.0%
	10-49	55.4%
	50 & over	24.8%

Q6a. Outgoing, by you and your employees?

No Reply	2.3%
1-9	26.1%
10-49	57.4%
50 & over	14.2%

Q6b. Incoming, from customers, suppliers, job applicants, etc.?

A.	No Reply	2.1%
	1-9	19.6%
	10-49	60.8%
	50 & over	17.5%

Q7. What is the most important use of your business telephones? (Please check ONE only)

A.	No Reply	.9%
	Sell-Solicit	6.5%
	Take orders, inquiries	43.1%
	Gather info., price quotes	10.9%
	Gen. business use	37.7%
	More for personal use than business	0.9%

Q8. Approximately, what was your total bill for telephone service last month? (Include all company's billing for telephone service.)

A.	No Reply	.5%
	$0-$99	23.2%
	$100-$199	23.5%
	$200-$499	29.6%
	$500-$999	13.5%
	$1000 & over	9.7%

Q8a. Is that higher, lower, or about your usual monthly bill?

A.	No Reply	2.2%
	About Normal	77.7%
	Higher	15.6%
	Lower	4.5%

Q9. About what percentage of your total telephone bill covers local service?

A.	No Reply	3.6%
	0-24	36.2%
	25-49	25.0%
	50-74	17.9%
	75-100	17.4%

Q9a. About what percentage of your total telephone bill covers long-distance?

A.	No Reply	3.5%
	0-24	35.3%
	25-49	21.2%
	50-74	23.9%
	75-100	16.1%

Q9b. About what percentage of your total telephone bill covers facilities rental?

A.	No Reply	9.3%
	0-24	70.0%
	25-49	11.7%
	50-74	5.4%
	75-100	3.5%

Q10. What percentage of your long-distance bills are for in-state calls?

A.	No Reply	2.9%
	0-24	22.4%
	25-49	11.5%
	50-74	17.4%
	75-100	45.8%

Q11. What size increase in monthly telephone costs would be prohibitive enough to cause you to reduce telephone service? (Please check only one)

A.	No Reply	17.8%
	$0-$99	38.6%
	$100-$249	21.6%
	$250-$499	10.1%
	$500-$999	6.3%
	$1000-$2499	3.4%
	$2500-$5000	2.2%

0508R
(6/25/84)

BEFORE THE

Federal Communications Commission

In the Matter of)
)
Investigation of Access and) CC Docket No. 83-1145
Divestiture Related Tariffs) Phase I
MTS and WATS Market Structure) CC Docket No. 78-72
) Phase I

NATIONAL FEDERATION OF INDEPENDENT BUSINESS PETITION FOR FURTHER RECONSIDERATION

The National Federation of Independent Business ("NFIB" or the "Federation") submits this pleading to request that the Federal Communications Commission reconsider certain aspects of the Memorandum Opinion and Order in this proceeding released May 15, 1984. ("May 15 Order") The immediate focus of this request is the action taken by the Commission through paragraph 124 of the May 15 Order. There the Commission denied a request advanced by the Clear Lake Telephone Company that the multi-line business access charge imposed by earlier Commission orders "go into effect only at the same time as the residential and single-line business charges...." Alternatively, the Clear Lake Telephone Company petition asked that the agency "re-define the [multi-line business access] charge to apply only to five or more access lines." This request was also denied in the May 15 Order.

Information that has only recently become available to NFIB shows that a factual predicate central to the Commission's analysis of business line access charges is not accurate in application to the small businesses that are NFIB members. We believe that these newly discovered facts compel immediate FCC action to stay the application of the $6.00 (maximum) multi-line business charge for small business telephone users--those with six lines or fewer. In addition, in the course of the agency's on-going re-examination of the access charges for residential and single-line customers, it is imperative that the Commission reconsider the appropriate level of access charges for multi-line business services of small business users.

INTRODUCTION

The National Federation of Independent Business is the nation's largest organization representing small and independent business. NFIB has an audited membership of 560,000 business owners; NFIB is headquartered in San Mateo, California, and has offices in all 50 state capitals and Washington, D.C. NFIB represents the interests and concerns of small- and independent-business owners before state and federal government agencies.

Retail (28.9%) and service (23.4%) businesses constitute the majority of NFIB's members, but the construction (10.9%), manufacturing (12.5%) and agricultural (6.2%)

industries are also well represented. The Federation's members are much more closely linked by the problems common to small businesses in general than by the concerns specific to any line of business. Approximately 45% of NFIB's member businesses have annual gross receipts of under $200,000. Over nine percent have a single employee and over 60% have six or fewer employees.

In the course of its annual membership renewal, NFIB has polled its members on the subject of their telephone usage. Some 12,400 poll responses have been tabulated and form the basis for the factual representations concerning small business telephone use contained in this pleading. The poll was not conducted as--and makes no representation of validity as--a statistically valid sampling of either NFIB's total membership 1/ or the small business community at large. Nonetheless, we believe that the results obtained provide valuable facts not previously available to the Commission that urgently require consideration in the context of the agency's access charge actions in this proceeding.

1/ Despite the fact that sophisticated sampling techniques were not employed in the survey design, the members surveyed mirror NFIB's overall membership very closely in terms of line of business, gross revenues and number of employers. It appears that the sample size of the surveyed population (12,381 respondents) was sufficiently great to mute any bias that might otherwise have been interjected in the results.

The NFIB survey reveals that small businesses use telephone services in ways very different from the large and interstate service-intensive firms on which the FCC's analysis centered. Of the NFIB survey respondents, 95% have six lines or fewer.[2] More importantly, in terms of the FCC's analysis, small businesses use their telephones almost exclusively to make local and intrastate calls. Even among those respondents who reported that a very large portion (75% or more) of their monthly telephone bill was for "long distance" services, nearly half said that 75% or more of the "long distance" charges were for intrastate calls.

These small business concerns are plainly not the source of the threat of "bypass" that motivated the Commission to adopt a flat, per-line access charge. Nor are they the firms that will benefit in any meaningful way from the reduction in interstate rates made possible by the user access charge.

The Commission continues to defend its determination to impose substantial access charges on multi-line business subscribers with the assertion that, "Business users are also generally the largest long distance users, so lower long distance rates should be of greatest offsetting benefit to them." May 15 Order at 59. This statement is flatly

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2/ Almost 82% of the respondents reported three lines or fewer: 39.2% had one line, 42.6% two or three lines and 13.1% four to six lines.

wrong as it relates to small business users. A large population of the NFIB survey respondents indicate that 24% or less of their monthly telephone bill "covers long-distance."[3] Almost half (45%) of the surveyed NFIB members reported that 75% or more of their "long distance" costs were for intrastate calls.[4] If one looks at an illustrative 2-3 line subscriber who devotes less than 25% of his normal monthly bill to long distance service, the total monthly bill will fall between $200 and $500 per month.[5] Even assuming a bill at the top of this range, the long distance component would be $125 (.25 x $500). The interstate long distance charges would be no more than $31.25 for those who indicated that 75% or more of their "long distance" charges are for intrastate service.

3/ It is instructive that those who reported that they spend less than 25% of their communications dollars on long-distance service appear to resemble very closely the entire sampled population in other respects. For example, 41% of those in this category have 2-3 telephone lines, compared with an overall survey incidence of 42.6% with 2-3 lines; 24.3% of the group reporting 24% or less of their monthly bill devoted to long distance had bills of $100-200 per/month while 24.1% of the total surveyed population had monthly bills in the $100-200 range.

4/ This percentage was virtually constant across those who reported that less than 25% of their monthly bill went for long-distance service (47.6%) through those who indicated that 75% or more of their bill was for long-distance service. Even those who use a (relatively) large amount of inter-exchange service make very little use of interstate service.

5/ 42.7% of the 2-3 line subscribers reporting long distance costs of less than 25% of the monthly bill showed bills in this range. Of the overall population of 2-3 line subscribers, 46.4% showed bills of $200-500.

(.25 x $125). Such a subscriber--a very typical small business concern--will pay $12-$18.00 per month in access charges to achieve a long-distance rate saving of $1.90 (.061 x $31.25). The "offsetting benefit" found by the Commission does not exist at meaningful levels for the small business community.

Because the Commission was unaware of the telephone usage patterns of small businesses, it has unknowingly structured a price system that seriously penalizes this portion of the business community in order to benefit those firms that do use interstate telecommunications extensively. This mistake must be cured. The present structure imposes a charge on the small business community which it cannot afford in order to avoid a problem--by-pass--which it did not create. This is not defensible on regulatory grounds or by reference to basic notions of fairness. The cure requires both immediate relief and a thorough re-examination of access charge scheme as it relates to small business users.

ARGUMENT

The driving force behind the Commission's determination that non-useage sensitive charges associated with local exchange lines are an imperative attribute to a rational and workable system for pricing regulated telecommunication services is the fear that in the absence of such charges "inefficient bypass" will significantly deplete the population of users of the regulated services, leaving a smaller universe of rate payers to bear the undiminished costs of regulated service.

A brief review of the basis for this conclusion may be in order.[6] The non-traffic sensitive element of telecommunications costs is fixed. This is so whether one considers local exchange facilities and interstate exchange facilities separately or in the aggregate. The Commission's analysis of the consequences of substantial user bypass of the regulated public network begins with this recognition of the fixed nature of non-traffic sensitive costs. Necessarily, if the extent of volume traveling over the non-traffic sensitive plant is diminished, the cost per unit of volume will have to be increased if telephone companies are to recover their full costs (including a fair return on their investment in these facilities).

In the Commission's view, there exists a genuine and immediate threat of bypass in the event that the price of interstate telecommunications services reaches a level above that at which certain users could, through the development of unregulated facilities that do not employ the public network, transport messages at a cost per unit of volume below that of

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6/ The Commission's primary discussions of the "uneconomic bypass" phenomenon appear in *MTS and WATS Market Structure*, CC Docket No. 78-72 Phase I, FCC 84-36 (Released February 15, 1984) 4-6 ("February 15 Order"); *MTS and WATS Market Structure*, CC Docket No. 78-72 Phase I, FCC 83-356 (Released August 22, 1983) 6-7; *MTS and WATS Market Structure*, CC Docket No. 78-72 Phase I, 93 F.C.C. 2d 241, 251-54 (1983); *MTS and WATS Market Structure*, CC Docket No. 78-72 Phase I, 90 FCC. 2d 135, 145-47 (1982).

regulated service.[7/] Were such bypass to occur at any significant level, the remaining users of the public network would be required to pay higher prices. This is so because the fixed non-traffic sensitive costs associated with those services would not decline although the volume of traffic to which such costs are allocated would be smaller.

The Commission's proposal for eluding the specter of significant bypass does not, of course, affect the level of non-traffic sensitive costs. Instead, the Commission would redistribute those costs by developing a dramatically new system of pricing for services. Essentially, the Commission has proposed to decrease the price of interstate services and increase the price of local exchange services. By the agency's logic, this strategy will succeed in stifling the economic incentives for bypass even if the aggregate (local exchange plus interstate) price charged to a customer remains constant. That is, the Commission believes that the incentive to bypass is different for a telecommunications consumer who pays $75 for local service and $25 for interstate service than for the same consumer--making precisely the same use of the telecommunications network--if the services are priced at $25 for local exchange service and $75 for interstate service.

7/ By the term "regulated service" in this context we mean both telecommunications services that are directly regulated through tariff and the untariffed resale or shared use of those services.

The pricing structure that elevates local rates will--by the FCC's assessment--decrease the likelihood of significant bypass. Although never expressly articulated in the Commission's various utterances on the subject of "uneconomic bypass" the assumption implicit in this argument is that bypass of local exchange communications is not feasible.[8]

Out of respect for the well developed administrative feel of the FCC for the state of the telecommunications industry, NFIB is ready to indulge the largely unsubstantiated conviction "that uneconomic bypass is a threat to the vitality of the existing telecommunications network." February 15 Order at 6. Indeed, it matters little whether the threatened bypass of the public network is economic or uneconomic. The Commission is evidently unwilling to deny recovery to telephone companies for the fixed cost of facilities abandoned

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8/ There is an additional conclusion imbedded in the Commission's analysis: It is assumed that the consumption of local exchange telecommunications services will not vary so significantly with the price attached to those services as to materially affect demand, at least as measured by the number of lines to which each local exchange customer subscribes. The Commission itself has questioned this assumption in the contexts of Centrex-CO, residential and single-line business access charges. In determining that Centrex-CO lines should bear an access charge of $2.00 per line, the FCC worried that a higher charge would lead to migration from the service, resulting in stranded investment very much like that thought to flow from bypass. The agency's decision to defer application of any access charge to residential and single-line business lines was animated by concern that increased local service rates would force these subscribers to curtail consumption, with the ancillary affect of narrowing the universality of service. The special form of "bypass" threatened by curtailment of local service usage applies to small business users as well and should be considered by the FCC in establishing access charges for the six line and under multi-line business customers.

owing to economic bypass. In that context, the upward spiral in rates almost certain to result from any bypass can be used as a justification for subsidies to services threatened by bypass in order to forestall the progression from bypass to excess or stranded investment in underutilized facilities with subsequent rate increases.

NFIB is, likewise, willing to respect the FCC's measure of the level at which interstate rates must be established in order to avert bypass even though, as the Commission has candidly conceded, there is insufficient information "to devise an end user charge that is calibrated to recover just enough to deter uneconomic bypass . . . ." Id.[9/]

What remains, then, is to determine an appropriate distribution of increased local exchange rates. NFIB is in emphatic disagreement with the Commission's resolution of this ultimate issue.

At the threshhold, it is important to recognize that an increase in local exchange service charges will very likely effect a net redistribution of overall (the aggregate of intraexchange and interexchange) telecommunications costs.

9/ For purposes of deterring bypass the question is not the real cost of the services that might be subject to bypass, but rather the cost of bypass technology itself. Ideally, the interstate services in which the Commission fears bypass ought to be priced just below the cost at which the same services could be secured through bypass facilities. This would both effectively avoid bypass and minimize the extent to which other regulated services need to be burdened with increased prices in order to subsidize the bypass-threatened services.

This is so because different telephone users have different relative demands for local exchange and interstate service. The extent of redistribution is magnified by the flat, per-line charge format adopted by the Commission. As the Commission has hesitantly recognized in its decision to defer the application of any per-line access charge to residential and single-line business telephone subscribers, it is simply not the case that each local exchange telephone line is responsible for the consumption of an equal amount of interstate service. Were all local lines responsible for equal consumption of interstate service, the pricing changes effected by the access charge decisions would have no redistributional affect: The increase in local exchange costs per line would be offset exactly by a complimentary decrease in the costs of long distance service by the subscriber to that line.[10] This is plainly not the case. Consequently, a net cost redistribution will occur. The NFIB survey indicates that one important segment of the population that will be required to bear increased costs as a consequence of the FCC's action is the small business community. We do not believe this consequence defensible by the standards of either economic efficiency or more broadly contoured measures of fairness.

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[10] Such a scheme would not necessarily be without effect. The Commission's analysis assumes that price can affect the volume of interstate service because, at some price, interstate service can be supplanted by the interposition of by-pass technology. The demand for local service is thought--at least comparatively--inelastic owing to the unavailability of alternatives for achieving a substitute for the local exchange switched network. Thus, an efficiency of sorts can be accomplished by decreasing interexchange prices (and thereby avoiding bypass) and enforcing a commensurate increase in local exchange line rates.

Assume for the moment that the Commission's price restructuring will have no affect on the total volume of telephone service consumed by any subscriber and that the mix in service between local exchange and interstate calls consumed by each remains static. Because, as the NFIB survey shows, a large segment of the small business community uses multi-line local exchange service almost exclusively to place local or intrastate calls, the net affect of the Commission's action will be to provide precisely the same telephone service to the small business users but to exact a higher price for that service. By definition, because aggregate cost will not have changed, some other segment of the population will benefit from this increased burden on small businesses by the enjoyment of lower overall costs for the service that they continue to consume at constant levels. The Commission's action will provide a benefit to those who use proportionately more interstate service. That benefit will be paid for by the small business community. To the affected small business users, this result is catastrophically unfair.

Nothing in the Commission's various utterances on this subject helps to palliate that injustice. The Commission has provided two attempted justifications for this redistribution of the burden of telephone costs. The first of these, the "offset" of lower interstate rates is at odds with the facts; as the NFIB study shows, small businesses do not use enough interstate service to benefit significantly from decreases in interstate rates.

The Commission's second attempt at justification suggests that absent the redistribution, owing to the phenomenon of bypass, the costs to be borne by small business users (and, possibly, others as well) will be even greater. That is, the Commission suggests that the increase in expense allocated to small business users is defensible because, in its absence, a still less desirable result will occur. This is not a sufficient reply for the simple reason that bypass of the public network can be avoided without this disruptive redistributional effect.

As the discussion above intimates, a decrease in interstate service prices offset by an increase in local exchange service prices can be perfected without redistributional affect--or with less profound affect--if one attempts to match the incidence of increased local exchange costs burden with the level of benefit to be achieved by lower interstate rates. It is axiomatic that if increases in local costs are calibrated to approximate the amount of long distance service consumed by each subscriber, the redistributional affects of the pricing change will be minimized.

Such a scheme would blunt the threat of bypass quite as effectively as the measures that the FCC has endorsed. By the Commission's analysis, the threat of large-scale bypass is meaningful only for calls that travel outside of the local exchange. So long as the charges assessed for such calls remain just below the cost of constructing and maintaining bypass facilities, no bypass will occur. Offsettingly high prices for local exchange service do not give rise to the threat of bypass precisely because no alternative to the ubiquity of the local exchange facilities exists. Thus, without changing the total telecommunications bill of any consumer--large or small--the Commission could effectively ensure against the wide-spread inauguration of bypass facilities. The cure thus entails increasing the local exchange cost of each consumer in precise proportion to the amount that the interexchange service costs of that consumer are decreased to guard against by-pass.

NFIB believes that such a result should be sought for two unimpeachable reasons. It will minimize the economic disruption of massive cost redistribution by matching the burden of increased local cost with the benefit of less expensive long distance service. It will also tend to cause the telephone users who have the power to exercise the bypass option (large interexchange service consumers) to bear the costs of insurance against bypass. There is an elemental equity to the notion of associating the cost required to prevent bypass with those telephone subscribers who present the threat of bypass.

It is, of course, impractical and likely impossible to impose a flat, per-line access charge on local exchange service in an amount that will mirror identically or even very closely the savings in interstate service costs to be achieved by the subscriber to each local line. The NFIB survey does indicate, however, that small business telephone subscribers with six lines or fewer ought not to be made to bear costs at the level imposed by the Commission's access line decisions. Closer study is plainly needed in order finally to forge a scheme of local exchange access charges that will more closely parallel the offsetting benefit of decreased interstate service. However, we submit that immediate relief for this category of subscribers is both appropriate and necessary.

The Commission should either suspend entirely the access charges levied against multi-line business subscribers with six or fewer lines--according them parity of treatment with residential users and single-line businesses--or, at the least, reduce significantly the charge imposed upon this class of users during the pendency of the proceedings required to calculate a fair final charge. The facts derived from the

NFIB survey establish unequivocally that the FCC's present structure of access charges discriminates unjustly against small business telecommunications users. The Commission must not permit this discrimination to persist; immediate remediation is imperative.

Respectfully submitted

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THE TELEPHONE COMPANIES AND SMALL BUSINESS

A SUMMARY OF ISSUES IN 1984

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HISTORICAL BACKGROUND

IN 1943, THE LAST COMPETITIVE TELEPHONE SERVICE AREA IN THE U.S. BECAME A MONOPOLY SERVICE AREA. AS A RESULT, AT&T ACHIEVED AN EFFECTIVE MONOPOLY IN PROVISION OF TELEPHONE SERVICES AND EQUIPMENT OVER 80% OF THE U.S. THE COMPANY CONSISTED OF FOUR PRINCIPAL COMPONENTS:

- LOCAL OPERATING COMPANIES SUCH AS C&P, SOUTHERN BELL, NEW ENGLAND BELL, ETC., RESPONSIBLE FOR DIRECT RELATIONS WITH CONSUMERS AND FOR LOCAL TELEPHONE SERVICE, INCLUDING EQUIPMENT.
- LONG LINES, RESPONSIBLE FOR LONG-DISTANCE AND INTERNATIONAL SERVICE,
- WESTERN ELECTRIC, RESPONSIBLE FOR EQUIPMENT MANUFACTURING, AND
- BELL LABS, RESPONSIBLE FOR RESEARCH AND DEVELOPMENT.

IN THE REMAINDER OF THE U.S., TELEPHONE SERVICE AND EQUIPMENT WAS PROVIDED BY A VARIETY OF INDEPENDENT COMPANIES AND COOPERATIVES.

AT&T'S MONOPOLY STATUS WAS CONFIRMED DE FACTO IN 1956, WHEN THE FEDERAL GOVERNMENT DROPPED AN ANTITRUST SUIT IN EXCHANGE FOR A PLEDGE BY THE COMPANY TO REFRAIN FROM ENTRY INTO MOST NON-COMMUNICATION BUSINESSES...INCLUDING COMPUTERS. DURING THE PERIOD 1967-1973, THE MONOPOLY OVER EQUIPMENT, INTERNATIONAL SERVICES WAS ERODED BY A SERIES OF LEGISLATION, COURT DECISIONS, AND FCC RULINGS. AT THE SAME TIME, THE COMMON CARRIER BUREAU OF THE FCC ATTACKED VARIOUS RATE PROPOSALS OF AT&T AS ILLEGAL AND/OR ANTICOMPETITIVE. IN RESPONSE, AT&T LOBBIED EXTENSIVELY FOR MODIFICATION OF THE 1956 CONSENT DECREE AND FOR LEGISLATION EFFECTIVELY EXEMPTING LOCAL TELEPHONE SERVICE FROM ANTITRUST PROVISIONS.

HISTORICAL BACKGROUND (CONT.)

IN 1979 AND 1981, THE FCC PARTIALLY ABROGATED THE TERMS OF THE 1956 CONSENT DECREE IN THE "COMPUTER TWO" DECISION, WHICH ALLOWS AT&T TO ESTABLISH A "FULLY-SEPARATED" UNIT TO ENTER THE DATA PROCESSING FIELD (THIS SUBSIDIARY, KNOWN IN THE INDUSTRY AS "BABY BELL," IS NOW ATTIS.) THE FOLLOWING YEAR, AT&T NEGOTIATED A NEW CONSENT DECREE IN RESPONSE TO ANOTHER ANTITRUST SUIT BY THE DEPARTMENT OF JUSTICE, WHICH INCLUDED A PARTIAL DIVESTITURE. UNDER THE TERMS OF THE DIVESTITURE, MODIFIED BY JUDGE HAROLD GREENE, THE OPERATING COMPANIES WERE "SPUN OFF" FROM AT&T AS EIGHT INDEPENDENT FIRMS (KNOWN AS BOC'S), WHILE BELL LABS, WESTERN ELECTRIC, LONG LINES, AND ATTIS WERE RETAINED BY AT&T.

UNDER THE NEW STRUCTURE, ONLY AT&T RATES NORMALLY COME UNDER THE REGULATORY PURVIEW OF THE FCC. THE OPERATING COMPANIES, WHOSE FOCUS IS ON INTRA-STATE SERVICE, ARE REGULATED PRIMARILY BY STATE PUBLIC SERVICE COMMISSIONS.

SOURCES OF SMALL BUSINESS DISCONTENT WITH TELEPHONE COMPANIES

1. SHARP INCREASES IN LOCAL TELEPHONE RATES AND RELATED CHARGES
2. SHARP INCREASE IN EFFECTIVE ADVERTISING RATES FOR YELLOW PAGES
3. INCREASED RATES FOR SPECIALIZED SERVICES...E.G., SERIES 7000 VIDEO RATE
4. PERCEIVED DECLINE IN SERVICE QUALITY
5. DISCRIMINATORY TREATMENT OF SMALL BUSINESS
6. INABILITY OF SMALL BUSINESSES TO ACHIEVE COST-EFFECTIVE USE OF "HIGH-TECH" INNOVATIONS

INCREASES IN RATES FOR BASIC SERVICE

1. PRIOR TO THE '82 CONSENT DECREE, THE TELEPHONE COMPANIES CONSISTENTLY ARGUED THAT BUSINESS TELEPHONE RATES "SUBSIDIZED" RESIDENTIAL TELEPHONE RATES, AND THAT TOLL RATES SUBSIDIZED LOCAL SERVICE. LOGICALLY, DIVESTITURE SHOULD RESULT IN LOWER RATES FOR BUSINESS TELEPHONES AND LOCAL SERVICE.

2. INSTEAD, WITH SOME EXCEPTIONS, BUSINESS RATES HAVE INCREASED...ALTHOUGH NOT AS RAPIDLY AS RESIDENTIAL RATES. IN 1983, FOR EXAMPLE, ILLINOIS BELL REQUESTED AN 11% INCREASE FOR BUSINESSES OUTSIDE THE CITY OF CHICAGO, WHILE RESIDENTIAL RATES WERE INCREASED BETWEEN 6-25% FOR THE SAME SERVICE AREA. IN WEST VIRGINIA, BUSINESS RATES WERE INCREASED 16%, WHILE THE RESIDENTIAL RATE REQUESTED REPRESENTED AN 86% INCREASE.

3. PER LINE RATES HAVE INCREASED AS MUCH AS 25% FOR BOTH BUSINESS AND RESIDENCES, ALTHOUGH THE GENERAL PATTERN REMAINS THAT A BUSINESS LINE RATE IS OFTEN DOUBLE THE PRICE OF A RESIDENTIAL LINE RATE.

4. INSTALLATION FEES--INCLUDING MOVING TELEPHONES FROM ONE POINT TO ANOTHER WITHIN THE SAME FACILITY--HAVE INCREASED UP TO 400% DURING THE LAST 30 MONTHS.

THE YELLOW PAGES AND SMALL BUSINESS

1. THE YELLOW PAGES HAS BEEN THE SINGLE MOST IMPORTANT ADVERTISING MEDIUM FOR THE SMALL RETAILER. IT IS FAR LESS IMPORTANT FOR NATIONWIDE RETAILERS.

2. EFFECTIVE RATES FOR YELLOW PAGES INCREASED DRAMATICALLY IN THE LATE 1970'S AND EARLY 1980'S WITH A POLICY OF REPLACING SINGLE SERVICE AREA YELLOW PAGES FOR EACH SERVICE AREA WITH MULTIPLE YELLOW PAGES FOR EACH SUBAREA.

3. PER ADVERTISEMENT RATES HAVE INCREASED BY 100-200% DURING THE LAST FOUR YEARS.

4. FOR A WASHINGTON-AREA SMALL BUSINESS, THE EFFECTIVE RATE FOR AN AREA-WIDE ADVERTISEMENT HAS INCREASED APPROXIMATELY 500-600% SINCE 1978.

5. ALTHOUGH THE YELLOW PAGES IS A HIGHLY PROFITABLE REVENUE CENTER FOR THE TELEPHONE COMPANIES, EFFORTS TO PROVIDE A COMPETITIVE DIRECTORY HAVE NOT PROVEN TO BE ECONOMICALLY VIABLE.

6. THE YELLOW PAGES ARE UNREGULATED, BUT YELLOW PAGES INCOME IS CONSIDERED IN SOME STATES IN THE REVIEW OF TELEPHONE RATE REQUESTS.

INCREASED RATES FOR SPECIALIZED SERVICE: SERIES 7000

MOST SMALL BUSINESSES DO NOT USE SPECIALIZED SERVICES WITH SET TARIFFS, SUCH AS EXTERNAL PRIVATE LINES. SOME OF THE FIRMS WHICH USE SUCH SERVICES, HOWEVER, HAVE REPORTED GREATLY INCREASED RATES. ONE EXAMPLE OF THIS IS THE SERIES 7000 TARIFFS, WHICH PROVIDE VIDEO TRANSMISSION AND SET-UPS.

THE PRINCIPAL EFFECT OF THE 35-70% INCREASE IN VIDEO TRANSMISSION PROVIDED BY THE TELEPHONE COMPANY HAS BEEN FELT BY INDEPENDENT TELEVISION STATIONS, MOST OF WHICH FALL UNDER THE SMALL BUSINESS DESIGNATION. (NETWORKS INCREASINGLY HAVE FOLLOWED THE LEAD OF PBS AND USE SATELLITE OR PRIVATE MICROWAVE, WHERE POSSIBLE). THE SERVICES PROVIDED UNDER THIS TARIFF ARE USED FOR TRANSMISSION OF LIVE NEWS, PUBLIC AFFAIRS, AND SPORTS EVENTS, AND FOR "TEMPORARY NETWORK" PROGRAMMING. IN SOME CASES, THE INCREASED RATES HAVE THREATENED THE PROFITABILITY OF ALREADY MARGINAL INDEPENDENT UHF STATIONS, WHO DEPEND ON LIVE COVERAGE OF SPORTS AND ON THEIR ROLE AS SECONDARY AFFILIATES FOR THEIR HIGHEST RATINGS AND ADVERTISING REVENUES.

PERCEIVED DECLINE IN SERVICE QUALITY

1. AT&T LONG LINES, WESTERN ELECTRIC, AND BELL LABS--THE CORE OF THE NEW AT&T--GENERALLY HAD FEW DIRECT CONTACTS WITH SMALL BUSINESS PRIOR TO THE CONSENT DECREE. MOST SERVICE AND CONSUMER CONTACT WAS PROVIDED THROUGH THE LOCAL OPERATING COMPANIES; MARKETING BY THE DIVISIONS WAS GEARED PRIMARILY FOR SERVICING VERY LARGE FIRMS.

2. THIS TRADITION HAS MADE AT&T SLOW TO DEVELOP EFFECTIVE CUSTOMER RELATIONS. FOR EXAMPLE, NORTHWESTERN BELL IN LATE 1983 WAS DISCOVERED TO BE PROVIDING VIRTUALLY ALL CUSTOMER-CONTACT FUNCTIONS--BILLING, MARKETING, INSTALLATION, MAINTENANCE, ETC.--TO ATTIS, A PART OF THE AT&T CORE, IN VIOLATION OF FCC RULINGS. SMALL BUSINESSES HAVE COMPLAINED OF DELAYS IN ACQUIRING SERVICES AND EQUIPMENT FROM AT&T SINCE THE CONSENT DECREE BEGAN TO TAKE EFFECT.

3. AS THE BOC'S SHIFT FOCUS ONTO "INFORMATION SERVICES" AND SPECIALIZED SERVICES, THERE ARE REPORTS OF INCREASINGLY DISINTERESTED SERVICE FOR THE SMALL CONSUMER FROM THE LOCAL TELEPHONE COMPANY.

4. PART OF THE REDUCTION IN INDIVIDUAL ATTENTION CAN BE TRACED TO PERSONNEL REDUCTION AND REORGANIZATION AMONG THE BOC'S, IN ANTICIPATION OF SLOW GROWTH AND THE DESIRE TO ACHIEVE A HIGHER RATIO OF DEPRECIABLE EQUITY FROM EXPENSES FOR INVESTMENT PORTFOLIO PURPOSES.

DISCRIMINATORY TREATMENT TOWARD SMALL BUSINESS

1. SMALL BUSINESSES ARE DENIED OPPORTUNITY TO SHARE IN REVENUE FROM PUBLIC TELEPHONE USE; SOURCE OF CONTENTION OVER "PRIVATE" PAY TELEPHONES.

2. "CLOSED," NATIONAL SYSTEM OF CONTRACT ORDERING BY AT&T RESULTS IN VIRTUALLY NO SUPPLY CONTRACTS AWARDED TO LOCAL SMALL BU$INESSES

3. REPUTEDLY POOR RECORD OF SUBCONTRACTING AND JOINT VENTURES WITH SMALL BUSINESS SINCE DIVESTITURE.

4. SMALL BUSINESSES ARE GIVEN LOW PRIORITY IN MARKETING OF NEW SERVICES. ROCHESTER TELEPHONE, FOR EXAMPLE, PLANS TO OFFER REGIONAL INTERCITY MICROWAVE DIGITAL SERVICE TO CUSTOMERS USING PRIVATE LINES OR WATS, BUT NOT TO SMALL BUSINESSES, DURING THE COMING YEARS.

SMALL BUSINESSES AND "HIGH-TECH" COMMUNICATIONS

1. THE PRINCIPAL BENEFITS OF DIVESTITURE AND DEREGULATION TO CONSUMERS ARE REDUCED RATES FOR LONG DISTANCE AND IMPROVED ACCESS TO ENHANCED SERVICES.

2. RATE REDUCTIONS FOR LONG DISTANCE TELEPHONE SERVICE--BASED ON USE OF DOMESTIC SATELLITES, AND MICROWAVE TRANSMISSIONS, AS WELL AS STIFF COMPETITION AMONG SUPPLIERS--ARE OF FAR LESS VALUE TO SMALL BUSINESSES, DEPENDING ON LOCAL MARKETS, THEN TO OTHER CONSUMERS.

3. ENHANCED SERVICES--E.G., DATA TRANSMISSION SERVICES, "SMART" TERMINALS, CELLULAR RADIO AND OTHER MOBILE SERVICES--ARE INFREQUENTLY COST-EFFECTIVE FOR SMALL BUSINESSES. INSTEAD, THEY ADD RELATIVELY LITTLE TO THE PROFITABILITY OF MOST SMALL FIRMS.

WHAT DO SMALL BUSINESS RATES SUBSIDIZE?

PRIOR TO DIVESTITURE, AT&T ENJOYED A HIGH DOLLAR VALUE PROFIT BUT A RELATIVELY LOW RATE (LESS THAN 10%). IT WAS ASSUMED THAT ATTIS WOULD DRAMATICALLY INCREASE THE OVERALL PROFIT MARGIN. THE BOC'S, SADDLED WITH THE TASK OF PROVIDING LOCAL SERVICE, WERE ASSUMED TO BE FAR LESS PROFITABLE; SOME COMMENTATORS ARGUED THAT THEY WOULD BE ECONOMICALLY UNVIABLE. THESE ASSUMPTIONS WERE BASED ON THE TRADITIONAL PREMISE THAT LONG DISTANCE TOLL RATES AND BUSINESS SERVICE IN GENERAL EFFECTIVELY SUBSIDIZED RESIDENTIAL USERS.

IN FACT, SINCE THE CONSENT DECREE OF 1982, AT&T HAS EXHIBITED SLOW GROWTH AND A LACK OF COMPETITIVE SPIRIT. IN CONTRAST, MANY OF THE FORMER OPERATING COMPANIES HAVE PROVEN TO BE HIGHLY PROFITABLE AND COMPETITIVE.

PART OF THE ATTRACTIVENESS AND PROFITABILITY OF THE BOC'S HAVE BEEN ACHIEVED BY COST REDUCTIONS. IN 1983, FOR EXAMPLE, CINCINNATI BELL REPORTED A 45.9% INCREASE IN NET EARNING WITH ONLY A 5.8% INCREASE IN REVENUE; NYNEX REPORTED A MORE MODEST 9% INCREASE IN NET EARNINGS FROM A 4.6% INCREASE IN REVENUE.

ADDITIONALLY, RATE REQUESTS TO STATE PUBLIC SERVICE COMMISSIONS HAVE INCLUDED A DRAMATIC INCREASE IN RETURN ON BASE RATES AND RETURN ON EQUITY; FROM 11.5% FOR MOST REQUESTS IN 1982 TO 14% AT THE END OF 1983. RETURN ON EQUITY IS APPROACHING 19%. IN ALL CASES, THE BOC'S JUSTIFY THE INCREASES TO STIMULATE INVESTOR INTEREST.

WHAT DO SMALL BUSINESS RATES SUBSIDIZE? (CONT.)

ADDITIONALLY, THERE ARE OTHER THEORIES WHICH CAN EXPLAIN THE USE OF THE REVENUE DERIVED FROM SMALL BUSINESS:

- IN ADDITION TO PRODUCING A HIGHER RATE OF RETURN FOR PORTFOLIO PURPOSES, SMALL BUSINESS TELEPHONE REVENUE MAY BE USED TO CONTINUE TO SUBSIDIZE RESIDENTIAL SERVICE. THE PATTERNS OF RATE REQUESTS GRANTED MAKES THIS INCREASINGLY IMPLAUSIBLE. THE ABSENCE OF A HISTORICALLY-VALID COST ACCOUNTING SYSTEM TO INDICATE THE COSTS OF FULL RESIDENTIAL SERVICE IN COMPARISON TO THE COSTS OF LOCAL BUSINESS SERVICE PREVENTS DISCONFIRMATION.

- LOCAL TELEPHONE SERVICE IN GENERAL IS PROVIDING CAPITAL FOR NEW, RELATIVELY HIGH-RISK VENTURES IN CONSULTING AND R&D BY THE BOC'S, OPERATING INDEPENDENTLY AND AS A CONSORTIUM IN COMPETITION WITH THEIR FORMER PARENT FIRM.

- LOCAL TELEPHONE SERVICE IN GENERAL IS PROVIDING CAPITAL FOR FACILITY CONSTRUCTION BY THE BOC'S...AN INVESTMENT MADE INCREASINGLY ATTRACTIVE BY NEW HIGHER DEPRECIATION. SUCH CONSTRUCTION, INCLUDING REPLACEMENT OF METAL CABLE BY OPTICAL FIBER, ADDITIONAL MICROWAVE FACILITIES, ETC., IS BASED ON ANTICIPATION OF FUTURE DEMAND FOR NON-VOICE SERVICES AND FOR IMPROVING THE ATTRACTIVENESS OF THE OPERATING COMPANIES FOR INVESTMENT PURPOSES BY INCREASING THE EXPENDITURE/EQUITY RATIO.

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